STIKEMAN ELLIOTT

Stikeman Elliott LLP Barristers & Solicitors

5300 Commerce Court West, 199 Bay Street, Toronto, Canada M5L 1B9

Tel: (416) 869-5500 Fax: (416) 947-0866 www.stikeman.com

Direct: (416) 869-5688
E-mail: gzacher@stikeman.com

**FILED BY RESS & MAIL**

March 28, 2013
File No.: 128927.1001

Kirsten Walli
Board Secretary
Ontario Energy Board
Yonge-Eglinton Centre
P.O. Box 2319
2300 Yonge Street, Suite 2700
Toronto ON M4P 1E4

Dear Ms. Walli:

**Re: East-West Tie Transmitter Designation Process**
**EB-2011-0140**

Enclosed please find Iccon Transmission, Inc.'s and TransCanada Power Transmission (Ontario) LP's Responses to Interrogatories in the above referenced matter.

As directed, PDF searchable copies of the Responses to Interrogatories are being filed through RESS and two paper hard copies are also being filed.

Yours truly,

P Duffy / for:

Glenn Zacher

/sc
Encl.

cc: Pablo de la Sierra
Tom Patterson

# ICCON/TPT RESPONSES TO INTERROGATORIES

## A. Questions for all applicants:

**1. Please provide your proposed organizational chart for the project development and construction phases as well as for the operation and maintenance phase, showing the various functions (including those functions listed in 4.1 of the Filing Requirements) and the reporting structure. Please include in these charts the names of members of the proposed management team (including the project manager / lead) and technical team who would be leading each function.**

Iccon/TPT's proposed project management organizational chart, including the names of Iccon/TPT's proposed management team, is attached as Appendix "A".[1] This project management structure will be utilized for both the project development and construction phases of the project.[2]

Iccon/TPT cannot at this early stage provide an organizational chart and proposed project management team for the operation and maintenance phase of the project. As noted in the Application, Iccon/TPT anticipate that once the E-W Tie line enters into service, they will utilize a relatively small in-house management and technical team (General Manager, Project Director, Controller) to manage one or two outsourced maintenance companies and limited legal and regulatory personnel.[3]

**2. For the chosen project manager / lead, please confirm if this person will be dedicated to this project and describe this person's experience in managing similar projects.**

Iccon/TPT confirms that the proposed General Manager Juan J. Soto Martinez will be dedicated to this project.

Mr. Soto, whose CV can be found at Exhibit "A" of Vol. 2 of the Application, has over 40 years of experience in the power sector and is presently the Technical Director responsible

[1] CVs for the proposed management team personnel are included at Exhibit "A" of Vol. 2 of the Application. CVs not provided in the Application are attached as Appendix "B".
[2] See s. 4.1 of the Application for further detail regarding the project resources that will be dedicated to each phase of the project and how they will be managed.
[3] See s. 4.1.8 of the Application

for the technical management of transmission projects in the Power Division of Isolux Infrastructure. Mr. Soto has extensive experience managing similar projects, including supporting projects at the bidding stage, assembling the management and technical teams, overseeing procurement and managing the development process through to commercial operation of the facilities. The following is list of transmission projects Mr. Soto's has overseen[4]:

- Cahoeira Paulista Transmissora de Energia Brazil ("CPTE")
- Vila do Conde Transmissora de Energia Brazil ("VCTE")
- Porto Primavera Transmissora de Energia Brazil ("PPTE")
- Itumbiara Transmissora de Energia Brazil ("ITE")
- Serra da Mesa Transmissora de Energia Brazil ("SMTE")
- LT Triangulo Brazil ("LTT")
- Riberao Preto Transmissora de Energia Brazil ("RPTE")
- Serra Paracatu Transmissora de Energia Brazil ("SPTE")
- Poços de Caldas Transmissora de Energia Brazil ("PCTE")
- Jauru Transmissora de Energia (South Phase) Brazil ("JTE Sur")
- Jauru Transmissora de Energia (Norte Phase) Brazil ("JTE Norte")
- Interligaçao Eletrica Norte e Nordeste Brazil ("IENNE")
- Linhas de Xingú Transmissora de Energia Brazil ("LXTE")
- Linhas de Macapá Transmissora de Energia Brazil ("LMTE")
- Linhas de Taubaté Transmissora de Energia Brazil ("LTTE")

[4] Details of these projects can be found in Appendix "B" to section 4 of the Iccon/TPT Application.

- Uttar Pradesh Transmission Company India ("UPPTCL")
- Wind Energy Transmission Texas USA ("WETT")

**3. For the list of "key technical team personnel" provided in response to section 4.2 of the Filing Requirements, please provide the specific proposed project / O&M role for each member.**

The following table lists the proposed project roles for each of the key technical team personnel" identified in section 4.2 of the Filing Requirements and the Application.[5] As stated above, Iccon/TPT has not at this early stage identified proposed operation and management roles/personnel:

| Name[6] | Role |
|---|---|
| **Joint Venture — Project Development and Execution Support** | |
| Luis Garcia-Monge | Development, permitting and project management |
| Ailton Costa | Regulatory and maintenance management |
| Evandro Cavalcanti | Construction management and cost control |
| Robert Mattei | Project implementation management |
| **EPC Services — Isolux Ingeniería** | |
| Juan Provvidente | EPC — Project management and coordination |
| Raul Magana | EPC — Transmission engineering management and coordination |
| Flavio Parpinelli | EPC — Contract management, client relationship management |
| **Routing and Environmental Services — Third Party** | |
| Kenda Pollio | Routing and permitting management and analysis |

[5] The proposed roles description the nature of the individual's responsibilities and do not necessary correspond to current or future job titles.
[6] CVs not provided in the Application are attached as Appendix "B".

| Name[6] | Role |
|---|---|
| Anthony Ciccone | Routing, Environmental and permitting management and analysis, stakeholder engagement support |
| Caitlin Burley | Routing and permitting management and analysis, stakeholder engagement support |
| **Land Services — TransCanada** | |
| Scott Clark | Manager, land acquisition |
| Carl Letwin | Senior land representative |
| Lindsay Bisson | Land analyst |
| Murray Robertson | Land representative |
| Dale Norman | Manager, land consulting team |
| **Community Relations Services — TransCanada** | |
| Nicole Aitkens | Manager Community Relations |
| Nancy Venegas | Senior community relations advisor |
| **Aboriginal Engagement — TransCanada** | |
| Alain Parise | Manager, aboriginal engagement |
| Ryan McFadden | Senior advisor, aboriginal engagement |
| Art Cunningham | Senior advisor, aboriginal engagement |
| Michael Fox | Senior advisor, aboriginal engagement |
| Darren Harper | Senior advisor, aboriginal engagement |
| Marvin Pelletier | Senior advisor, aboriginal engagement |

**4. On a national and international basis, identify any and all transmission projects where the applicant, its partner(s), shareholder(s), affiliate(s) or other related entities (collectively referred to as the "Applicant") have commenced the construction of a new transmission line but which the Applicant has been unable to complete and/or bring into service. Please describe the reasons why the Applicant has been unable to complete the transmission line and/or bring it into service.**

To the best of its knowledge, Iccon/TPT is not aware of any transmission projects that Isolux Infrastructure or TransCanada have been unable to complete construction and/or bring the line into service after commencing construction.

**5. Please list the individuals that you plan to allocate to each of a) negotiating First Nation and Métis participation and b) conducting consultation with First Nation and Métis communities as delegated by the Crown. For each individual, please describe the individual's responsibilities on the team, relationship to the affected communities (if any), and relevant experience.**

Iccon/TPT will rely on a team who are subject matter experts with respect to Aboriginal and Stakeholder engagement and major energy projects in Ontario. The core team will be comprised of the following positions:

- *Manager*: Responsible for Aboriginal engagement overall and the individual who will lead negotiations.
- *Senior Advisors*: A minimum of two senior advisors will be responsible for community engagement. One position will be responsible for assisting community and member-owned business to access opportunities including acquiring appropriate certifications and other requirements to participate in the project. This position will also work with the general contractor and Iccon/TPT to support the project's contract and long-term employment objectives.
- *Community Development*: This position will support initiatives related to training, employment readiness and oversight of the project's Community Investment program.
- *Supply Chain Lead*: This position will assist communities in maximizing benefits

related to Aboriginal contractors and/or employees involvement in the project during the pre-construction, construction and operational phases of the project.

In addition, Iccon/TPT will, upon discussions with communities, determine which communities would be best served by a community liaison to facilitate community participation.

The total number of team members and configuration will be determined following designation. Iccon/TPT's model for Aboriginal engagement includes internal resources as well as local contract resources that have relevant local expertise. The following personnel (internal and consultants) will be available to fill the above described positions.

- Alain Parise, TransCanada, Director, Aboriginal and Tribal Relations
- Ryan McFadden, TransCanada, Manager, Aboriginal Relations, Major Projects, Eastern Canada
- Art Cunningham, TransCanada, Senior Aboriginal Relations Adviser
- Darren Harper, Maawadoon Consulting
- Marvin Pelletier, Maawadoon Consulting
- Michael Fox, Maawadoon Consulting, Fox High Impact

Maawadoon has extensive experience in northern Ontario working in Aboriginal engagement on previous power projects, mining projects (Ring of Fire) as well as forestry initiatives.

Further information about Iccon/TPT's Aboriginal and Stakeholder Engagement Team can be found at pages 15 and 16 of Appendix "A" to section 3 of the Application.

**6. If you are selected as the designated transmitter, will the First Nation and Métis communities identified by the Ministry of Energy in its letter to the Ontario Power Authority ("OPA") dated May 31, 2011, and possibly other affected and interested First Nation and Métis communities, be given an equal opportunity to participate in the project? Will all affected (or interested) First Nation and Métis communities be given equal opportunity for all forms of participation in the project (e.g. employment opportunities, equity participation)?**

Iccon/TPT will engage with all First Nation and Métis communities whose traditional territory is crossed by the East-West Tie project. Iccon/TPT will also engage with First Nation and Métis communities that express an interest in the project and will determine the appropriate level of engagement with each community through this engagement process.

The determination of participation for all Aboriginal communities affected by the project will be dependent upon further discussions with each of those individual communities about the potential impacts of the project on affected Aboriginal communities, their specific interests and desires. The final Aboriginal engagement strategy will be refined through a collaborative process of confidential engagement with each Aboriginal community, for all forms of participation contemplated for the project.

**7. Does a First Nation or Métis community need to be "affected" by the project, in order to participate, or can it participate if it is not affected but still interested?**

Please see the response to Interrogatory A-6.

**8. Have you (or an affiliate) assisted, or will you (or an affiliate) assist, a prospective First Nation and Métis equity participant by providing a loan, by arranging financing through an independent financial institution, or otherwise? If yes, please explain how.**

Iccon/TPT have not, and currently have no plans to, provide loans or other financing arrangements to prospective First Nation and Métis communities affected by the East-West Tie project. Iccon/TPT believes in providing long term value to affected communities through a suite of possible options and this is best determined through consultation with each community.

**9. Have you undertaken, or will you undertake, an assessment to quantify the potential impacts on the affected First Nation and Métis communities, the amount of which could be counted toward the participating community's equity contribution?**

Iccon/TPT has not yet undertaken an assessment to quantify the potential impacts of the project on affected First Nation and Métis communities. In Iccon/TPT's view, the process of determining potential impacts cannot be unilaterally undertaken by a proponent and it would be premature to assess those impacts at this stage. This necessarily requires engaging with affected First Nations and Métis communities and other stakeholders. For example, prior to the completion of development work, a proponent cannot select a preferred route for the proposed line with any realistic degree of confidence.

Iccon/TPT, if designated, will undertake an assessment to quantify the potential impacts of the project on the affected First Nation and Métis communities. The determination of participation for all Aboriginal communities affected by the project will be dependent upon further discussions with each of those individual communities. Please see the response to Interrogatory A-6 describing the process Iccon/TPT will use to engage with affected First Nation and Métis communities.

**10. For those who propose to have or have equity participation with First Nation or Métis partners, how do you anticipate this participation will affect your credit rating, if at all?**

Iccon/TPT has not proposed at this time equity participation with any First Nation and Métis communities (see answer to Interrogatories A-8 and 9).

**11. With respect to First Nation and Métis participation issues, please identify any First Nation and Métis communities you have initiated contact with, those you have met with, and those you have existing arrangements to meet with.**

In spring 2011, TransCanada initiated communications with a number of affected First Nations and Métis communities. Further details of those communications are provided in section 3.1 of the Application.

**12. Does your Consultation Plan treat engagement with First Nations and Métis communities, whose traditional territories will be crossed by the proposed East-West Tie route, on an equivalent basis? Where there are differences in the proposed engagement between First Nations and Métis communities please explain and provide justification for the difference.**

Upon designation, Iccon/TPT will request initial meetings with all First Nation and Métis communities whose traditional territories will be crossed by the project on an equivalent basis.

The purpose of the initial meetings will be to determine a process by which each of the First Nation and Métis communities will be engaged on the East-West Tie project. The level of further engagement for each First Nation and Métis community will be dependent on an assessment of the potential effects and interests of each community which will be determined through further ongoing engagement.

**13. Please outline and provide examples of relevant experience the applicant has in undertaking procedural aspects of consultation with Métis communities in the context of the development, construction or operation of a transmission line or other large scale construction projects.**

As outlined in section 3.2 of its Application, the Iccon/TPT will be supported by TransCanada in executing the Aboriginal Engagement Plan. TransCanada engages Métis communities on all projects the company undertakes where Métis communities are potentially affected. TransCanada has entered into a number of confidential memoranda of understanding with provincial Métis organizations to facilitate engagement with Métis locals and Métis regions. TransCanada applies the same engagement methodologies to all Aboriginal communities and determines through a series of factors and discussions with each Aboriginal community the appropriate level of engagement and the activities it will undertake to meet that level.

Typical engagement activities include provision of project information, face-to-face meetings and other forms of communication and ongoing updates regarding the proposed project. In some cases, a project workplan will be developed in collaboration with the Aboriginal community to plan the project activities and the budget associated with the planned activities. The workplan may include participation in Traditional Land Use and/or Traditional Ecological Knowledge studies, identification of community businesses and/or individuals interested in project-related work, capacity development and community investment.

TransCanada also provides Métis communities with information on bidding and contracting processes and on economic opportunities available on the project for qualified Aboriginal contractors and community members. Please refer to the response to Interrogatory B-2 for more details on TransCanada's Aboriginal contracting strategy.

The above approach has been implemented successfully for the following projects which have been approved by the National Energy Board:

- Groundbirch Mainline, including the Groundbirch Mainline (Saturn Section)
- Horn River Mainline, including the Horn River Mainline (Cabin Section), Horn River Mainline (Ekwan Section), Horn River Mainline (Kyklo Creek Section) extensions
- Keystone Pipeline, including Keystone XL
- Keystone Hardisty Tank Terminal
- Leismer to Kettle River Crossover
- Northwest Mainline Expansion

**14. Is the applicant or any of its affiliates/ partners aware of any outstanding claims, applications, reviews or other proceeding brought against it (them), as transmitter or otherwise, by a First Nation or Métis community who disputes the use or proposed use of land, including disputes related to consultation or accommodation, compensation, mitigation, remedial measures, or other similar claims? If so, please identify and describe.**

On March 1, 2013 the Fort Nelson First Nation filed with the Federal Court of Appeal an application for judicial review of a National Energy Board decision issued on January 20, 2013 in respect of the project known as Northwest Mainline Komie North Extension. The application alleges that that the Crown did not meet its duty to consult with respect to the application for the project. Iccon/TPT is not aware of any other such outstanding claims.

**15. Has your proposed design been utilized successfully in terrain and weather conditions similar to that of Northern Ontario? If not, please comment on the potential risks of your proposed design with respect to its use in Northern Ontario.**

The proposed design (lattice towers, double circuit) is a solution that has commonly been used in Northern Ontario. Iccon/TPT's proposed design takes into account the Appendix A — Minimum Design Criteria for the Reference Option, which specifies the required weather conditions.

Further, as detailed in the Application, Isolux Ingeniería, the EPC contractor that Iccon/TPT propose to engage, has designed and constructed self-supporting steel lattice towers under wide variety of challenging terrains and weather conditions, including conditions similar to those of Northern Ontario. As briefly summarized below, it has also addressed other design challenges in similar terrain and weather conditions.

*Terrain*

Isolux Ingeniería has successfully implemented different foundation types for the rock/soil conditions that may be encountered in Northern Ontario, including:

- pre-cast concrete foundations (pre-manufactured) for Esperanza-El Calafate Interconnection, Argentina (sand-clay and gravel, sand, smooth-clay soil conditions);
- drilled piers for WETT, LXTE, LMTE, and other Brazilian projects (both hard soil and rock conditions);
- belled piers for LXTE, LMTE, and other Brazilian projects (poor soil conditions);
- reinforced concrete piles on wetland areas of LXTE and LMTE projects; and
- concrete (rock anchor) footings on some CFE projects in Mexico (hard rock)[7].

The final foundation design will depend upon actual subsurface conditions at the final tower

[7] See Appendix "B" to section 4 of the Iccon/TPT Application for a description of the CFE projects.

locations. For budgeting purposes, Iccon/TPT has assumed 40% of foundations will be anchored in rock.

*Weather*

As noted, Iccon/TPT's proposed design takes into account the Appendix A — Minimum Design Criteria for the Reference Option, which specifies the required weather conditions.

Isolux Ingeniería has successfully tailored tower families to address challenging weather conditions. As an example, Isolux Ingeniería designed a tower family for a transmission project in the Patagonia region of Argentina where wind and ice storms are common. The project consists of a 132kV transmission line (Esperanza-El Calafate Interconexion) with a 142 km extension and a 132/33/13.2kV substation (El Calafate) located in Santa Cruz province.

**16. To the extent that your application includes a tower design not typically used in Ontario, please indicate whether the construction schedule in your application includes time for testing of new tower designs.**

Iccon/TPT accounted for the testing of the proposed new family of towers in the construction schedule provided in section 7.3 of the Application. The detailed design and testing of the towers is anticipated to take approximately 12 months during the "Engineering" task shown in the Gantt chart attached as Appendix "C" to section 7 of the Application.

**17. The necessity for the requirement at paragraph 3.6.4 of the Board's Minimum Technical Requirements has been questioned. Please comment on the risk of single loop galloping and the cost of meeting the Board's requirement.**

Iccon/TPT believes the risk of a single loop galloping is low based on actual local experience that, in its opinion, is the best indicator of the risk of galloping. HONI and GLP have indicated that they have never experienced any conductor damage due to galloping, including on the existing double circuit 230kV HONI line which has been in service for over 40 years. Iccon/TPT has assumed that these existing lines were not designed to the standard required by paragraph 3.6.4 of the Board's Minimum Technical Requirements.

The protection against single loop galloping generally requires a larger vertical and/or horizontal clearance between tower wires to prevent circuit outages as compared with double or triple loop requirements. The project would also require larger foundations to support the enhanced tower design. Eliminating single loop galloping requirements from consideration would effectively lower costs of the towers and foundations.

As noted in section 6.5 of the Application, Iccon/TPT estimate cost savings in material and construction labour of approximately $12 million if this requirement is removed.

**18. In your proposed design for the line, are there any space limitations that would restrict the ability of workers to maintain the new line?**

The Applicant's plan was premised on a high level preliminary design consistent with the pre-development stage of the project. The detailed parameters for the design of the line (including routing and ROW width) will be subject to a thorough examination as part of the environmental assessment and leave to construct processes and will depend on a variety of economic, technical, social and environmental considerations. To ensure there is adequate space to maintain the new line, the Applicant will include the reliability of the transmission system, including necessary future maintenance, as criteria when conducting the "alternative methods" analysis in its environmental assessment.

**19. Different tower structures, foundations, tower spacing, etc. were proposed in the various applications. What were the applicant's design assumptions (e.g. right-of-way spacing from Hydro One Networks Inc. ("HONI")'s assets, tower height, span length, foundation, etc.) to avoid any adverse impact to HONI's transmission system, including: (i) in the event of a catastrophic failure of the proposed new line; and (ii) access by HONI to the existing transmission line for routine maintenance and service restoration?**

As noted in response to Interrogatory A-18, Iccon/TPT will include the reliability of the transmission system (including HONI's existing line) as a criterion when undertaking its "alternative methods" analysis in the environmental assessment. Amongst other things, Iccon/TPT will study tower locations that are sufficiently spaced from HONI's existing towers during the detailed design phase so there will be no impact on HONI's existing transmission line in the event of a tower failing. Iccon/TPT will enter into a protocol with HONI for the use of sky-crane helicopters over the existing transmission line (see section 7.5 of the

Application for a discussion of Iccon/TPT's proposal to use sky crane helicopters).

Iccon/TPT will also work with HONI on a protocol that will ensure HONI has adequate access, both during and after construction, to the existing and new access roads for routine maintenance and service restoration of the existing transmission line.

**20. With respect to the construction, operation and maintenance of the new transmission line, what were the applicant's assumptions to avoid any adverse impact to HONI's transmission system, including: (i) in the event of a catastrophic failure of the proposed new line; and (ii) access by HONI to the existing transmission line for routine maintenance and service restoration?**

See the response to interrogatories A-18 and A-19.

**21. The Independent Electricity System Operator ("IESO") indicates that the double-circuit line described as the Reference Option has several benefits over the single-circuit option. These include:**

- **a higher thermal rating (up to about 800 MW) that can be exploited for future expansion by adding more voltage control or compensation equipment;**
- **a higher level of reliability because of its inherent redundancy (2 circuits to one, a lower exposer to common-mode failures, more flexibility to perform line and terminal maintenance);**
- **less reliance on voltage control and compensation equipment, and special protection systems;**
- **less electrical equipment involved and less risk of equipment failure; and**
- **a higher level of operating security as described in section 16 of the IESO's August 2011 Feasibility Study.**

**Are there any beneficial attributes of the single-circuit option, other than reduced cost? Are there other benefits of the double circuit line that are not listed above?**

Iccon/TPT does not agree, as the premise of the question suggests, that a single-circuit option offers the benefit of reduced cost on a full lifecycle basis. No party in this proceeding has filed a detailed full lifecycle analysis that includes all incremental costs of a single circuit design (such as additional line losses, costs associated with addressing n-1 conditions, reduced capacity, etc.) to support that assertion.

Reduced line losses are an additional benefit of the double circuit line that could be material over the 50 to 75-year lifespan of the proposed line.

**22. The IESO suggests that to assess whether a proposal will satisfy IESO reliability criteria at the required transfer level, some characteristics for proposals must be available. What is the a.c. resistance (at 20°C), reactance and susceptance (i.e. R, X, B) for each circuit of the Wawa to Marathon and Marathon to Lakehead sections of the new line(s)?**

For a 220 kV/100 MVA base values, the lines' positive sequence parameters per unit are:

| Line | Length (km) | (R) a.c. resistance at 20°C (per circuit) | ($X_L$) reactance | ($B_C$) susceptance |
|---|---|---|---|---|
| Wawa-Marathon | 170 | 0.0174 | 0.0833 | 0.5702 |
| Marathon-LakeHead | 230 | 0.02359 | 0.1127 | 0.7715 |

**23. In the IESO Feasibility study of August 2011, the IESO indicates that it assumed a route length of approximately 400 km, and used electrical circuit parameters representative of that length of route. For transmitters proposing alternative paths that vary 40 km or more in length from the reference 400 km, please comment as to whether the change in length will materially alter the electrical parameters of the line and whether the targeted transfer capability can still be achieved.**

As the project is at a pre-development stage, Iccon/TPT has not determined a preferred route for the line. A preferred route will be determined in the course of carrying out development work, including through consultation with Aboriginal communities and other stakeholders and through the environmental assessment and leave to construct processes.

It would be premature to identify a preferred route at this stage. The Alternative A-Prime route (which was the basis of the Applicant's analysis of schedule and costs) is 424 km in length.

If after consultation by Iccon/TPT, the final route exceeds 440 km, then the additional length would materially alter the electrical parameters for the line. The targeted transfer capacity could be maintained through the use of a shunt capacitor with a capacity greater than 125 MVAr and/or other reactive facilities such as series compensation or a static VAR compensator.

**24. For transmitters proposing to use 230 kV class equipment, please indicate whether the design you propose will be capable of continuous operation up to 250 kV as required by the IESO's Market Rules.**

Iccon/TPT confirms that its proposed design will be capable of continuous operation up to 250 kV as required by the IESO's Market Rules.

**25. Please describe any differences between the inputs that went into the Feasibility Study on record and your proposed design.**

Iccon/TPT's plan is consistent with the Reference Option. Iccon/TPT is not aware of any differences between the IESO's Feasibility Study and its proposed design.

**26. Please complete the following three tables to enhance cost comparability between applications. Applicants should provide the cost estimates based on their preferred option for the line. Where the preferred option is not the reference option, the tables should also be provided for the reference option.**

- **In completing the tables, please assume the following:**
- **All figures should be stated in 2012 dollars, without escalation in labour, materials or other costs.**
- **The development phase ends with the filing of a leave to construct application with the Board**
- **Taxes and duties should be excluded.**

| Development Activity | Estimated Cost | Reference in Application |
|---|---|---|
| Engineering, design, and procurement activity | **5,370,000** | **Sections 4.1.2, 8.2, 8.3** |
| Materials and equipment | — | |
| Permitting and licensing | **300,000** | **Section 4.1.4, 8.2, 8.3** |
| Environmental and regulatory approvals | **4,250,000** | **Sections 4.1.4, Appendix 9/Section 9, 8.2, 8.3** |
| Land rights (acquisition or options), including consultation and negotiation with landowners | **1,857,000** | **Sections 4.1.5, 9.1, 8.2, 8.3** |
| First Nation and Métis participation (direct and indirect costs, including impact mitigation if applicable) | **9,021,000** | **Sections 3, 10, 8.2, 8.3** |
| First Nation and Métis consultation | **11,028,000** | **Sections 3, 10, 8.2, 8.3** |
| Other consultation (community, stakeholder) | **800,000** | **Section 9.2, 8.2, 8.3** |
| IDC or AFUDC (if included in estimates) | — | **Not included** |
| Contingency | **4,140,000** | **Sections 8.2, 8.3, 8.5, Appendix D/Section 7** |
| Other (A&G Costs) | **8,775,000** | **Section 4.1.1, 8.2, 8.3** |
| **Total with Escalation** | **45,541,000** | **Section 8.2** |
| Escalation | **1,800,000** | |
| Less Post-LTC Development Costs | **12,996,000**[8] | |
| **Total w/o Escalation Pre-LTC Development Costs** | **30,745,000** | |

[8] Calculated by prorating the estimated 2015 development expenditures of $15,595,700 listed in section 8.4 of the Application assuming that Iccon/TPT files its leave to construct application on February 20, 2015 as projected in Appendix "B" to section 7 of Iccon/TPT Application.

| Construction Activity | Estimated Cost | Reference in Application |
|---|---|---|
| Engineering, design, and procurement activity | **11,770,000** | **Sections 4.1.2, 8.7, 8.9** |
| Project Management | **26,580,000** | **Sections 4.1.2, 4.1.3, 4.1.7, 8.7, 8.9** |
| Materials and equipment | **65,560,000** | **Sections 4.1.3, 8.7, 8.9** |
| Permitting and licensing | **—** | |
| Environmental and regulatory approvals | **2,000,000** | **Sections 4.1.4, 8.7, 8.9** |
| Land rights (acquisition or options), including consultation and negotiation with landowners | **10,700,000** | **Sections 4.1.5, 9.1, 8.7, 8.9** |
| First Nation and Métis participation (direct and indirect costs, including impact mitigation if applicable) | **2,855,000** | **Sections 3, 10, 8.7, 8.9** |
| First Nation and Métis consultation | **3,129,000** | **Sections 3, 10, 8.7, 8.9** |
| Other consultation (community, stakeholder) | **—** | |
| Site clearing and preparation | **45,685,000** | **Sections 4.1.7, 8.7, 8.9** |
| Construction | **203,142,000** | **Sections 4.1.7, 8.7, 8.10** |
| Site remediation | **1,633,000** | **Sections 4.1.7, 8.7, 8.11** |
| IDC | **34,333,000** | **Section 8.7** |
| EPC Contingency | **33,018,000** | **Section 8.7, Appendix D/Section 7** |
| Other | | **Section 8.7** |
| Financing costs | **16,320,000** | |
| A&G Costs | **16,166,000** | |
| Non EPC Contingency | **14,000,000** | |
| Miscellaneous (Initial operating cash, reserve accounts, LC costs, etc.) | **—** | |
| **Total w/o Escalation** | **486,891,000** | |

| Construction Activity | Estimated Cost | Reference in Application |
|---|---|---|
| | | |
| Escalation | **37,210,000** | |
| **Total with Escalation** | **524,101,000** | **Section 8.7** |

| Operations and Maintenance Activity | Estimated Cost | Reference in filed application |
|---|---|---|
| Major activities (please list, but cost estimate may be bundled) | **1,877,500** | **Section 4.1.8, 8.12** |
| Administration and general costs related to O&M | **2,865,000** | **Section 4.1.8, 8.12** |
| Regulatory costs | **500,000** | **Section 4.1.8, 8.12** |
| Contingency | **257,500** | **Section 4.1.8, 8.12** |
| **TOTAL with Escalation** | **5,500,000** | **Section 8.13** |
| Escalation | **650,000** | |
| **Total w/o Escalation** | **4,850,000** | |

**27. a) Please confirm that while costs may be reaggregated into the specified categories, the amounts in the tables are consistent with the overall estimates filed in your application.**

**b) Please reconcile each of the development, construction and operation phase totals produced in the tables with the total costs for each of these phases put forward in your application. The reconciliation should describe and quantify each reconciling element.**

The amounts provided in response to Interrogatory A-26 are consistent with Iccon/TPT's Application with the exception of the total cost for construction (shown as "Construction: Total with Escalation") which has been reduced from $526,348,000 to $524,101,000. The reduction results from the Board's direction that all figures be stated in 2012 dollars. This direction reduced IDC which is attributable to escalation by approximately $2 million and accounts for the difference between identified in the above table compared to the amount of identified in the Application.

**28. For each phase, please describe how the contingency amounts were determined.**

The contingency amounts are based on the types of risks identified in the risk matrix included as Appendix "D" to section 7 of Iccon/TPT's Application. The contingency amounts for each phase were determined using Iccon/TPT's judgment using the probability and impact ranges for each risk identified in the risk matrix. The risk matrix and the contingency amounts will be re-evaluated by Iccon/TPT once the final right-of-way corridor has been determined.

**29. With respect to operation, maintenance and administration costs, please indicate whether the applicant's stated OM&A costs are estimated on a standalone basis (i.e. the full OM&A costs of the line) or on a net basis (i.e. excluding costs incurred by affiliates or other regulated utilities providing services to the applicant). If on a net basis, please provide in detail the applicant's estimated OM&A costs on a standalone basis.**

Iccon/TPT's operation, maintenance and administration costs have been estimated on a standalone basis.

**30. With respect to the provision of services by HONI:**

- **a. What specific services were assumed in the application?**
- **b. What were the assumed associated costs?**
- **c. In the absence of any input from HONI, on what basis were these assumptions made?**
- **d. What is the impact on the application if the assumed services are not provided by HONI as envisioned by the applicant?**

This interrogatory is not applicable as Iccon/TPT's plan is based on the Reference Option.

**31. With respect to the use, modification or expansion of HONI's stations:**

**a. What specific uses, modifications or expansions were assumed in the application?**

**b. What were the assumed associated costs?**

**c. In the absence of any input from HONI, on what basis were these assumptions made?**

**d. What is the impact on the application if the assumed uses, modifications or expansions do not proceed as envisioned by the applicant?**

This Interrogatory is not applicable as Iccon/TPT's plan is based on the Reference Option.

**32. Please complete the following tables, detailing all transmission projects greater than 100 km in length, undertaken by the applicant, its partners, shareholders, affiliates, or any other entities which the applicant is relying on for the purposes of its application, in the past 10 years in all jurisdictions. Please provide the reasons for the budget and schedule variances for each project.**

*Isolux Infrastructure*

Completed tables showing any budget and schedule variance for all electricity transmission projects greater than 100 km in length undertaken by Isolux Infrastructure are attached as Appendix "C".

As detailed in sections 4.1.2, 7.4 and 8.10 and Appendix "B" to section 4 of the Application, Isolux Infrastructure's projects have been (with the exception of WETT in Texas) awarded through competitive auction processes where the winner was selected based on the lowest transmission rate bid. <u>The winner is bound by their bid and is at risk for project cost deviations.</u> Isolux Infrastructure has managed this risk by entering into lump sum fixed price EPC contracts with Isolux Ingeniería; consequently, any risk of cost overruns is borne by the EPC contractor. <u>As detailed in section 8.11 of its Application, Iccon/TPT is proposing to bring the benefits of this model to Ontario by entering into a fixed fee EPC contract for this project with Isolux Ingeniería at market based rates prior to leave to construct.</u> The fixed fee arrangement will incentivize cost efficiency and significantly limit ratepayer exposure to construction delays and cost overruns.

Iccon/TPT has not provided a variance table for Isolux Ingeniería. Isolux Ingeniería operates in the competitive business of EPC contracting and cannot disclose variances without providing highly confidential and sensitive details about its approach to bidding on contracts.

*TransCanada*

Completed tables showing any budget and schedule variance for natural gas and oil transmission projects greater than 100 km in length undertaken by TransCanada are attached as Appendix “D”.

## Questions for Iccon Transmission Inc. and TransCanada Power Transmission (Ontario) LP ("Iccon/TPT"):

**1. Please provide copies of the most recent credit rating reports for each of:**

- **TransCanada**
- **TransCanada Pipelines Limited**
- **Isolux Corsán Concesiones S.A.U.**
- **Isolux Ingeniería.**

Attached as Appendices "E" and "F" are credit rating reports for TransCanada PipeLines Limited (which includes TransCanada Corporation) from DBRS and Moody's. The S&P credit report for TransCanada PipeLines Limited is subject to licensing restrictions that prevents distribution of the report. The report can be purchased directly from the rating agencies for a nominal fee.

The 2011 Feller Rate certificate and report for Isolux Corsán Concesiones S.A.U. are attached as Appendix "G". The 2012 Feller Rate report for Isolux Ingeniería is attached as Appendix "H".

**2. Please provide a copy of TransCanada's Aboriginal contracting strategy.**

TransCanada's Aboriginal contracting and employment program is designed to fulfill TransCanada's commitments to Aboriginal communities. It is contained within the company's Aboriginal Relations Policy and is applied to all TransCanada projects and operations TransCanada's Aboriginal Relations Policy is attached as Appendix "I". TransCanada's Supply Chain Management Department (SCM) is responsible for the implementation of TransCanada's Aboriginal contracting and employment program.

A summary of how TransCanada's Aboriginal contracting and employment program applies to projects is outlined below.

*Pre-General Contract Award Activities*

All general contractors bidding on TransCanada's projects are required to submit an

Aboriginal participation plan which is evaluated in the bid evaluation process. The plan is focused on how the general contractor will involve the local communities in contracting, employment and training.

TransCanada's Supply Chain Management (SCM) team assist project advisors in seeking information from local communities regarding businesses and individuals which may be interested in project-related contracting and employment opportunities and share the company's contracting practices. Based on this preliminary information, TransCanada's SCM team prepares an internal participation plan for the project. The plan includes the identification of potential services and employment opportunities that will be available for Aboriginal contractors. The general contractor's Aboriginal plan along with TransCanada's Aboriginal participation strategy is then combined to create an overall Aboriginal Participation Plan involving the local communities.

TransCanada attends general contractor pre and post-award meetings to communicate both the community's and company's expectations and terms regarding Aboriginal participation. The successful contractor is required to report regularly regarding the agreed-upon Aboriginal participation program for the project.

*Post-General Contract Award Activities*

The communities are informed of who the successful general contractor is and the general contractor is provided with a preliminary list of available Aboriginal contractors and service providers prepared based on TransCanada's early engagement with the communities. Meetings are arranged for the general contractor, accompanied by TransCanada, to meet with affected communities to explain the contracting and employment process and to identify any additional opportunities. TransCanada and the general contractor work in close alignment to implement the Aboriginal Participation Plan and continue working together throughout the project life cycle to ensure the Aboriginal Participation Plan is followed and the employment and subcontracting commitments are honored. Once the project is completed both parties review the actual results.

The general contractor is responsible for ensuring that Aboriginal businesses meet and adhere to required health, safety and environment standards.

In the event local communities do not have the will or capacity to participate, the general contractor may expand the search for qualified Aboriginal businesses to neighbouring communities.

TransCanada along with the general contractor offer post construction meetings with the communities to share the successes and challenges of the project.

*Post-Construction Activities*

Following the completion of construction, TransCanada and its general contractor offer to meet with the communities that participated in the construction phase. These meetings provide an opportunity to discuss each community's participation in the project and aid in the ongoing improvement of TransCanada's Aboriginal contracting and employment program by identifying successes and challenges experienced on each project.

*Other Activities*

TransCanada's SCM team continues to explore opportunities to expand Aboriginal participation on projects. For example, the SCM team has implemented a junior inspector trainee program that provides on-the-job training that may lead to full-time employment as an inspector on other projects.

*Reporting and Accountability*

General contractors are required to report regularly regarding Aboriginal participation to ensure adherence to the agreed-upon Aboriginal participation program. TransCanada offers communities participating in the project regular updates on participation.

TransCanada's SCM team maintains a confidential contractor database in support of enhancing Aboriginal participation on major projects as well as routine operations maintenance programs.

The SCM team also works with the Aboriginal Relations department to ensure adherence to any agreements the company may have with participating communities.

**3. Please provide a sample copy of a TransCanada Protocol Agreement.**

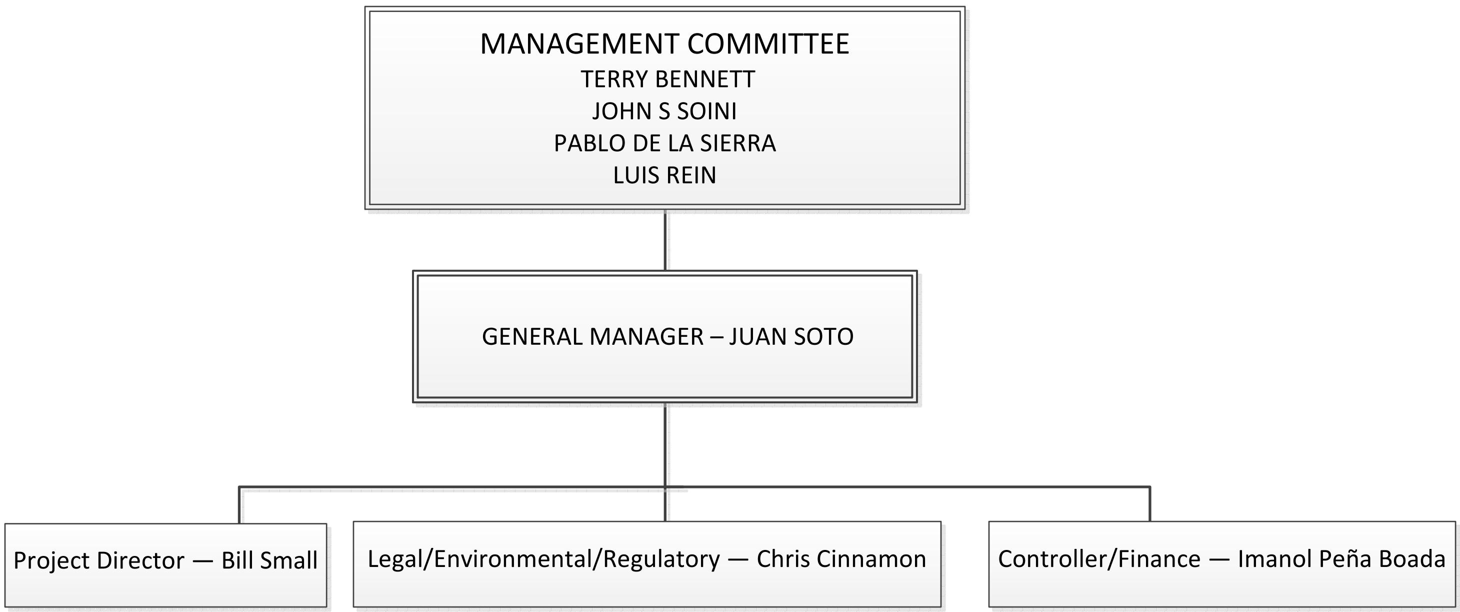
TransCanada's Aboriginal Relations Policy is attached as Appendix "I". The content of any agreement with First Nation and Métis communities is dependent upon a number of factors and on discussions and negotiations with each community. There is no sample or one size fits all Protocol Agreement. Existing agreements between TransCanada and Aboriginal communities are confidential and may not be disclosed without the consent of all parties to the agreements.

**4. Please indicate whether and, if so, where the time to apply for and obtain pre-construction permits is accounted for in Iccon/TPT's project schedule.**

Iccon/TPT accounted for the time to apply for and obtain pre-construction permits. The time is included in the task "Other Permitting" in the Gantt chart attached as Appendix "B" to section 7 of the Application.

# APPENDIX A

# PROJECT MANAGEMENT ORGANIZATIONAL CHART



# APPENDIX B

# Imanol Peña Boada

Nationality: Spanish
Address: c/Ana de Austria 52, Portal F, 3ºA, 28050 Madrid
Mobile: +34 608 882 700
E-mail: ipena@isoluxcorsan.com
Birth date: April 8th, 1974

## PROFESSIONAL EXPERIENCE

Apr 2008 - Ago 2011 **GRUPO ISOLUX CORSAN** Madrid, Spain
***Controller of Power Concessions Department***

- Economic planning of the concessionaires and holdings
- Follow-up of economics objectives and analysis of deviations
- Administrative organization, accounting and financial supervision
- Analysis of economic closings, balances and results of the division
- Preparation of annual structure budget
- Forecasts and monitoring of treasury of the concessionaires and holdings
- Follow-up and monitoring of financial economic models
- Coordination of annual external audit

Apr 2008 - Ago 2011 **GRUPO ISOLUX CORSAN** Madrid, Spain
***Controller of Energy Division***

- Economic planning of the projects and holdings
- Follow-up of economics objectives and analysis of deviations
- Administrative organization, accounting and financial supervision
- Analysis of economic closings, balances and results of the division
- Preparation of annual structure budget
- Coordination of annual external audit

Oct 2000 - Apr 2008 **GRUPO AFER** Madrid, Spain
***Chief of Administration***

- Control, coordination and supervision of the financial and analytical accounting, reporting of company results and deviations, monthly and annual closings, tax preparation, control of treasury and economic consolidation of the societies

## FORMAL EDUCATION

| | | |
|---|---|---|
| 1992 - 1997 | Graduated in Economic and Business Sciences<br>Universidad del País Vasco | Bilbao, Spain |
| 2005 - 2006 | Master of Advanced Accounting and Financial Management – CEF | Madrid, Spain |

## LANGUAGES

| | |
|---|---|
| **Spanish** | Mother tongue |
| **English** | High level, spoken and written |

## ADDITIONAL INFORMATION

**IT** Microsoft Office Professional (Word, Excel, Access, PowerPoint), Internet Explorer

September 2012

# LAND MANAGER
## DALE A. NORMAN

## PROFILE

During the past 27 years, Dale has directed the Company's complement of land agents and landmen. His previous Canadian Military Police experience and industry knowledge has enabled Dale to deal successfully with protracted and difficult property owner negotiations.

## RELATED WORK EXPERIENCE

### ACQUISITIONS AND NEGOTIATIONS

- Skilled in negotiations Easements, Petroleum and Natural Gas Leases, Gas Storage Agreements, Voluntary Pooling Agreements, Unit Operating Agreements, and Wind Option Agreements, from and through:
  - ♦ land evaluation
  - ♦ legal opinions
  - ♦ options
  - ♦ severances
  - ♦ 40 year title searches
  - ♦ construction
  - ♦ damage releases
- Knowledgeable in dealing with Ontario Hydro, CN & CP Rail and gas transmission companies regarding obtaining Easements, Leases, etc.
- Liaison with Conservation Authorities, Ministry of Natural Resources and Ministry of the Environment, County and Municipal Governments with regards to obtaining required permits, user agreements and zoning changes where required as well as negotiate for Easements and Leases for various oil and gas related activities
- Evaluate and successfully settle land and crop damage claims resulting from Easements and well site construction activities
- Act as liaison between client and landowners, contractors, surveyors, etc.

### SUPERVISION AND PERSONNEL MANAGEMENT

- Experienced in the supervision of both staff and contract land agents, Right-of-Way agents, title searchers, office support staff and accounting clerks
- Source, recruit, hire, train, motivate and manage staff as required
- Required to delegate job assignments, co-ordinate work load with other departments and resolve logistics problems
- Conduct weekly staff meetings, perform employee evaluations and participate in decisions relating to administrative procedures

## RELATED WORK EXPERIENCE (continued)

### PROJECT ADMINISTRATION

- Supervise day to day operations of the Land Agents and Landmen
- Responsible for the delegation of work assignments and the flow of paperwork and documentation through the system
- Required to prepare an operational gameplan when projects are undertaken and to perform post audits of projects to assess profitability
- Delegated as a Special Projects Manager within the Elexco Group for all Right-of-Way services including; pipelines, hydro, sewers and telecommunication cable
- Responsible for the implementation, set-up and co-ordination of a field office operation for Right-of-Way services for a 600 km. + fibre optics project for Bell Canada; successfully completed the project through the construction phase until clean-up and damage settlements were final; within time restraints and budget

### MARKETING AND CLIENT RELATIONS

- Establish mechanisms and paper flow that satisfy client requirements
- Maintain regular communications with clients to perform potential problem analysis
- Establish and maintain contacts with past, present and potential clients continually promoting the corporation's ability to be a market leader

## EMPLOYMENT HISTORY

| | | |
|---|---|---|
| **Land Manager**<br>**Senior Land Agent** | **THE ELEXCO GROUP**<br>London, Ontario | **1986 - Present** |
| **Military Police** | **THE ROYAL CANADIAN AIRFORCE** (retired) | **1964 - 1986** |

## PROFESSIONAL AFFILIATIONS

Ontario, International Right of Way Association
The Ontario Petroleum Institute
Michigan Chapter 7, International Right of Way Association
Northern Appalachian Landman’s Association

**Lindsay Bisson**
**218 – 8A Street N.E.**
**Calgary, AB**
**T2E 4J1**

**Phone: (403) 701-4782**
**lindsay_bisson@transcanada.com**

**Education:**

- Mount Royal University – Project Management Extension Certificate September 2012 to present.
- Olds College – LND 6045 – Land Agents Licensing, Fall 2012.
- Mount Royal College – Petroleum Land Contract and Administration Certificate 2003.
- Bishop Grandin High School 1998

**Career History:**

**July 2009 – Present** | **TransCanada PipeLines Limited**

Position: Land Analyst
Responsibilities include:

- Acquiring land rights for new pipeline, valve and meter station projects
- Maintaining existing land rights for pipelines and facilities
- Support Contract Analysts resolving complex land issues
- Supporting the issuance of approvals for all activities affecting TransCanada's system, including AUC, ERCB and NEB regulated facilities
- Support special projects as required
- Participate in maintenance of processes and procedures
- Inputting land data in to applicable land system
- Registration of land documents at applicable Land Titles office

**September 2004 – July 2009** | **AltaGas Income Trust**

January 2006 - July 2009

Position: Surface Land Coordinator
Responsibilities include:

- Coordinate external land agents and surveyors for survey and acquisition of land on construction projects and external land concerns.
- Day to day administration of land documents.
- Support team members on land projects.
- Handle internal and external questions or concerns.
- Development and continual maintenance of regulatory and legislative knowledge.
- Alternate/back-up for the administration of lease rentals.
- Alternate/back-up for the maintenance of the Alberta One Call database.
- Ongoing file maintenance.
- Maintain relations with landowners.

- Building & maintaining relationships with third parties and regulatory authorities.
- Land Title registrations, withdrawal of Caveats, Plan registrations, cheque requisitions, BA requests etc.
- Rental Reviews

September 2004 - January 2006 — Position: Surface Land Administrator
Responsibilities included:

- Administration of Third Party Agreements
- Lease Rental administration
- Administration of Land Title accounts
- Subdivision applications
- Alberta One Call Administrator

**June 2001 - September 2004** — **Re/Max Landan Real Estate**

February 2003 - September 2004 — Position: Executive Assistant/Office Manager
Responsibilities included:

June 2001 - February 2003 — Position: Receptionist/Secretary

**April 2000 – June 2001** — **Southland Registrations Ltd.**
Position: Certified Registry Agent

**August 1998 – April 2000** — **MoJo's License & Registry Services Inc.**
Position: Certified Registry Agent

**February 1996 – August 1998** — **Dairy Queen**
Position: Head Supervisor

**Nicole A. Aitken**

432 Hawkside Mews NW ♦ Calgary, Alberta T3G 3S1 ♦ Phone (403) 239-5490

Strategically focused professional, specializing in public relations, occupational health and safety, risk communication and issue resolution. Skills garnered through fifteen plus years experience in industry. A successful communicator with demonstrated ability to enthusiastically lead, influence and facilitate effective business outcomes and organizational change.

## PROFESSIONAL EXPERIENCE

***Manager, Community Relations*** *Feb 2013- Present*
*TransCanada, Calgary, AB*

- Providing leadership and guidance for the development, continuous improvement and implementation of TransCanada's strategic Stakeholder Engagement Framework and Socio-Economic Programs in order to deliver sustainable and responsible business results, timely and effective project support, and access to land;
- Leading, mentoring and building on the existing team of technical experts in ensuring effective and inclusive stakeholder engagement on proposed projects;
- Managing and monitoring TransCanada's engagement and commitments with community members and leaders, including local governments, community members and non-governmental organizations;
- Overseeing the completion of substantive and accurate regulatory filing documentation for the areas of Stakeholder Engagement and Socio-Economic programs, in compliance with Federal, Provincial, State and local regulatory requirements;
- Developing and maintaining positive relations with a wide network of local governments, local and national organizations and other interested parties;
- Monitoring legislative and legal case developments across Canada and the United States and modifying approaches and programs appropriately;
- Actively participating in industry associations and forums to enhance the sharing of lessons learned and best practices, while keeping current with the evolving legal and regulatory processes;
- Participating in and supporting emergency preparedness, exercises and actual events as they relate to engagement of communities, organizations and interested parties;

***Manager, Stakeholder Relations, Keystone Pipelines*** *Nov 2008 – Feb 2013*
*TransCanada, Calgary, AB*

- Supervised, managed and led a complex team of over 40 highly qualified multi-disciplinary specialists in the functional areas of community relations, public relations, media relations, government relations, Aboriginal and Tribal relations, communications and community investment.
- Developed and implemented strategic approaches to stakeholder relations that met or exceeded regulatory requirements. Contributed successfully to project planning and development consistent with corporate business objectives.
- Communicated effectively and provided overall governance regarding the establishment and maintenance of positive relationships with key project stakeholders (encompasses ~20,000 stakeholders; more than 150 local, Aboriginal and Native American communities in the 2 countries, 3 provinces and 9 states where Keystone has a direct impact).
- Identified, monitored and analyzed emerging stakeholder issues, and developed and implemented strategies, tactics and programs to mitigate and manage associated risk.
- Developed and maintained strong working relationships across North American industry and strategic stakeholder groups to influence and deliver desired business results (i.e. participation in regulatory process; influencing legislative activities)

***Stakeholder Relations Advisor, Keystone Pipeline*** *Feb 2005 – Oct 2008*
*TransCanada PipeLines Ltd., Calgary, AB*

- Ensured compliance with federal, provincial, state and local regulatory requirements as it related to public consultation and community outreach requirements.
- Developed appropriate standards, practices and procedures to support project and company goals associated with external communications, reputation management and corporate responsibility.

- Developed and maintained positive relations with key stakeholders along the project route including State government officials, county and local officials, community partners (Rotary Clubs, Lions Clubs). Acted as spokesperson and completed media interviews (TV, radio and print) representing the Keystone Pipeline Project and TransCanada as appropriate.
- Managed the coordination and participation of internal resources including Employee Communications, Media Relations, Community Investment, Government Relations, and Aboriginal Relations to support the project's engagement programs, to resolve emerging issues, and to maintain high quality, consistent relations with key external stakeholders and communities.
- Ensured that stakeholder engagement plans were designed, developed and implemented within appropriate budget controls and schedules (i.e. Keystone budget was U.S. $5 million through end of 2007; results exceeded expectations and were delivered under budget by ~30%).

***Community and Aboriginal Relations Liaison, Community Relations*** *Feb 2004 – Jan 2005*
*TransCanada PipeLines Ltd., Calgary, AB*

- Developed and executed effective stakeholder engagement and public consultation strategies and tactics that adhered to regulatory requirements in various jurisdictions (i.e. NEB, AEUB, FERC) integral to acquiring a social "license to operate".
- Provided effective community and aboriginal relations support services to client groups involved in the execution of system maintenance, improvement and business development projects.
- Liaised, influenced and built relationships with key community stakeholders as well as internal personnel at all levels of the organization.
- Provided leadership and direction to a variety of consultants and contractors while simultaneously managing and delivering desired results on multiple projects and priorities.

***Senior Health, Safety and Environment Advisor, Community, Safety & Environment*** *Feb 2002 – Feb 2004*
*TransCanada PipeLines Ltd., Calgary, AB*

- Recommended the direction and design of strategies and activities to mitigate significant health, safety and environmental risks related to company activities and to improve the organization's overall loss control management program.
- Managed and coordinated multiple projects relating to the administration and implementation of an effective Health, Safety and Environment Management System.
- Co-led the design, development and implementation of Incident and Issue Tracking (IIT), a web-based application for use by all company and contractor personnel to effectively manage incidents and issues. Effective implementation of the application was anticipated to save the company ~$5 million over 5 years.
- Developed and conducted a Pipeline Risk Management Seminar for University of Alberta, Industrial Safety and Loss Management Program students (primarily fourth year engineering students) and was requested to participate in an advisory capacity to the Program Chair.
- Facilitated the production of objectives and performance targets, and provided continuous trending, analysis and recommendations regarding the effectiveness of HS&E programs and procedures to all levels of management including the Executive Leadership Team and HSE Committee of the Board of Directors.
- Developed presentations and external communications for delivery by Senior Management.

***Intermediate Analyst, Operational Excellence*** *Aug 2001- Feb 2002*
*TransCanada PipeLines Ltd., Calgary, AB*

- Co-led the development of a Corporate Balanced Scorecard simplifying and focusing independent business process performance measures into consolidated, interdependent key performance indicators.
- Conducted benchmarking exercises to help define the effectiveness of current processes and to identify improvements resulting in process optimization.
- Prepared performance measurement reports, presentations and communications for the Executive Leadership Team and Board of Directors.

***Health, Safety and Environment Advisor, Health Safety & Environment*** *June 2000 – Aug 2001*
*TransCanada PipeLines Ltd., Calgary, AB*

- Developed and implemented a communication strategy and tactics to ensure key internal and external stakeholders understood and were aware of TransCanada's HS&E commitments, procedures, targets and programs as appropriate.
- Streamlined and consolidated six independent business unit practices into one HS&E performance measurement and reporting process.
- Facilitated the development and implementation of the CEPA award winning, Incident Management Process.
- Completed incident trending and analysis, industry benchmarking, sharing of best practices, and effectively communicated information to Senior Management, employees and other key stakeholders.

***Occupational Health and Safety Program Lead, Health Safety & Environment*** *Nov 1998 - June 2000*
*TransCanada PipeLines Ltd., Calgary, AB*

- Led the design, development, implementation and evaluation of health & safety policies, standards, programs, processes and procedures to ensure protection of people, property and the environment.
- Co-led the development and implementation of a HSE management system modeled after ISO 14001 elements.
- Conducted comprehensive, comparative and trend analysis to identify and leverage best practices, and to develop effective and practical Occupational Health and Safety solutions.

***Wellness Hygiene Specialist, Workplace Wellness Resources*** *Aug 1997 - Nov 1998*
*Nova Gas Transmission Ltd., Calgary, AB*

- Provided ongoing occupational hygiene guidance, direction and support to management and employees, to ensure workers and the public were not exposed to unacceptable health risks.
- Identified and evaluated the magnitude of potential hazards (chemical, physical, biological, ergonomic) in terms of the ability to impair employee health and well-being and prescribed or participated in the development of corrective measures (i.e. procedural, equipment changes) in order to eliminate, control or reduce health hazards.
- Completed audits according to NOVA protocols primarily in occupational hygiene and change management.

***Occupational Hygiene Technologist, Community Resources*** *May 1995 - Aug 1997*
*Nova Gas Transmission Ltd., Calgary, AB*

- Accountable for the collection, reporting, and integrity of occupational health and safety (OHS) related information supporting the development and implementation of OHS programs.
- Provided practical, client-focused occupational hygiene service to all of Nova Gas Transmission, including internal investigation of hazards and recommendation of control strategies.

***Environmental Consultant (contract)*** *Nov 1994 - Apr 1995*
*2000 Environmental Services, Calgary, AB*

- Responsible for research, collection and analysis of data relevant to waste minimization and disposal projects.
- Participated in the development and presentation of business proposals to effectively market services and expertise.

## EDUCATION

***Certificate in Corporate Community Involvement*** *2004*
Carroll School of Management, The Center for Corporate Citizenship, Boston College

***Environmental Technology Certificate*** *1994-1995*
Mount Royal College, Calgary, AB

***Bachelor of Science Degree*** *1990-1994*
Department of Biological Sciences, University of Calgary, AB

# APPENDIX C

**32.** Please complete the following tables, detailing all transmission projects greater than 100km in length, undertaken by the applicant, its partners, shareholders, affiliates, or any other entities which the appplicant is relying on for the purposes of its application, in the past 10 years in all jurisdictions. Please provide the reasons for the budget and schedule variances for each project.

**b. Schedule Variance Table**

| Name of Project | Details of project | Estimated development and construction time | Stage of process at which time estimate made | Actual development and construction time | Variance | Reason for variance |
|---|---|---|---|---|---|---|
| **TOTAL BRAZIL** | | | | | | |
| **ETEE** - Expansion Transmissao de Energia Eletrica | Brazil. 588km of 500kV Transmission Lines and associated substations<br>*COD: 23/12/2002* | 12/20/2002 | Concession Contract | 12/23/2002 | 3 | N/A |
| **ETIM** - Expansion Transmissao Itumbiara Marimbondo | Brazil. 212km of 500kV Transmission Lines and associated substations<br>*COD: 20/06/2004* | 8/20/2004 | Concession Contract | 6/28/2004 | -53 | Faster development and construction |
| **CPTE** - Cachoeira Paulista Transmissora de Energia | Brazil. 181km of 500kV Transmission Lines and associated substations<br>*COD: 28/11/2004* | 12/20/2004 | Concession Contract | 11/28/2004 | -22 | Faster development and construction |
| **VCTE** - Vila do Conde Transmissora de Energia | Brazil. 324km of 500kV Transmission Lines and associated substations<br>*COD: 09/05/2006* | 5/9/2006 | Concession Contract | 5/9/2006 | 0 | N/A |
| **PPTE** - Porto Primavera Transmissora de Energia | Brazil. 515km of 230kV Transmission Lines and 2 associated substations (one 440/230kV 2x450MVA, one 230/138 kV 2x150 MVA)<br>*COD: 17/10/2006* | 1/4/2007 | Concession Contract | 10/17/2006 | -79 | Faster development and construction |
| **ITE** - Itumbiara Transmissora de Energia | Brazil. 814km of 500kV transmission lines and 3 associated substations (500/230kV 750MVA, 500/230kV 400MVA, 500 kV)<br>*COD: 30/11/2006* | 30/11/2006<br>20/12/2006 | Concession Contract | 30/11/2006<br>20/12/2006 | 0 | N/A |
| **SMTE** - Serra da Mesa Transmissora de Energia | Brazil. 681km of 500kV transmission lines and 2 associated substations (500/138kV 2X300MVA, 500 kV)<br>COD: *18/02/2008* | 4/27/2008 | Concession Contract | 18/02/2008<br>27/04/2008 | -69<br>0 | Faster development and construction |
| **LTT** - LT Triangulo | Brazil. 708km of 500kV transmission lines and associated substation (500/345kV 2x900MVA)<br>*COD: 27/11/2008* | 12/27/2008 | Concession Contract | 27/11/2008<br>28/11/2008<br>27/12/2008<br>10/02/2009 | -30<br>-29<br>0<br>45 | Faster development and construction - due to the size and impact of the Project in the system, a staged energization sequence was established by the Brazilian System Operator |
| **RPTE** - Riberao Preto Transmissora de Energia | Brazil. 413km of 500kV transmission lines and associated substations<br>*COD: 09/04/2009* | 4/16/2009 | Concession Contract | 4/9/2009 | -7 | N/A |
| **SPTE** - Serra Paracatu Transmissora de Energia | Brazil. 246km of 500kV transmission lines and associated substation (500/345 kV 1050MVA, 345/138kV 2x300MVA)<br>*COD: 11/04/2009* | 4/11/2009 | Concession Contract | 4/11/2009 | 0 | N/A |
| **PCTE** - Poços de Caldas Transmissora de Energia | Brazil. 308km of 500kV transmission lines and associated substation (500 kV 2x1200 MVA)<br>*COD: 18/09/2009* | 10/20/2009 | Concession Contract | 21/05/2009<br>18/09/2009 | -152<br>-32 | Faster development and construction |
| **JTE Sur** - Jauru Transmissora de Energia (South Phase) | Brazil. 345km of 230kV transmission lines  and associated substations<br>*COD: 23/10/2009* | 8/16/2009 | Concession Contract | 10/23/2009 | 68 | A government act in the State of Rondonia during the early stages of development of the original JTE project derived in the suspension of some of the environmental license approval processes for some sections. The project was then divided in two separate projects. JTE North permitting process was suspended, as recognized by ANEEL, for a period of 4+ years, after which the construction proceeded on schedule.  ANEEL has recognized the permitting delays as being outside of the control of the proponent and economic compensations have already been approved. Contract is being split and contractual CODs revised and adjusted accordingly with ANEEL. |
| **JTE Norte** - Jauru Transmissora de Energia (Norte Phase) | Brazil. 595km of 230kV transmission lines and associated substations<br>*COD: 08/02/2013* | 10/20/2008 | Concession Contract | 2/14/2013 | 1578 | |
| **IENNE** - Interligaçao Eletrica Norte e Nordeste | Brazil. 720km of 500kV transmission lines and associated substations<br>*COD: 20/12/2010* | 12/17/2009 | Concession Contract | 12/20/2010 | 368 | Delays in receiving responses from the relevant environmental authorities. ANEEL has acknowledged permitting delays outside of the control of the proponent and that construction was on schedule. Contractual COD dates are in the process of being extended. |
| **LXTE** - Linhas de xingú Transmissora de Energia | Brazil. 508km of 500kV transmission lines and 2 associated substations (500kV, 500/230kV 2x450 MVA)<br>*COD: 2013 (under construction)* | 10/16/2011 | Concession Contract | 5/1/2013 (Est) | 563 (Est) | Delay in response by one or several of the envionmental authorities involved. Contractual COD to be adjusted appropriately. |
| **LMTE** - Linhas de Macapá Transmissora de Energia | Brazil. 683km of 500/230kV transmission lines and 3 associated substations (500 kV, 230/69kV 2x100 MVA, 230/69kV  3x150 MVA)<br>*COD: 2013 (under construction)* | 10/16/2011 | Concession Contract | 5/1/2013 (Est) | 563 (Est) | Delay in response by one or several of the envionmental authorities involved. Contractual COD to be adjusted appropriately. |
| **LTTE** - Linhas de Taubaté Transmissora de Energia | Brazil. 247km of 500kV transmission lines and associated substation (500/345kV 900 MVA, 500/138kV 900 MVA)<br>*COD: 2014 (under construction)* | 2/9/2014 | Concession Contract | 2/9/2014 (Est) | 0 (Est) | N/A |
| **INDIA** | | | | | | |
| **UPPTCL** - Uttar Pradesh Transmission Company | India (Uttar Pradesh). 1600km of 765/400kV transmission lines and 5 associated substations (5730MVA)<br>*COD: 2014 (under construction)* | 1/16/2014 | Concession Contract | 1/16/2014 (Est) | 0 (Est) | N/A |
| **USA** | | | | | | |
| **WETT** - Wind Energy Transmission Texas | USA (Texas). 605km of 345kV transmission lines and 6 associated substations<br>*COD: 2013 (under construction)* | Apr-13 | CCN approval | 7/31/2013 (Est) | 90 (Est) | Additional facilities - additional substation; expansion of planned substations for wind interconnections; control center -, coordination with other utilities, special - more costly and scarce - type of towers required by order, labor shortages (4,500+ km of transmission lines and 25+ substations simultaneously under construction in the area, and drain from superstorm Sandy restoration efforts), more complex foundations due to soil condition (rock). |

**32.** Please complete the following tables, detailing all transmission projects greater than 100km in length, undertaken by the applicant, its partners, shareholders, affiliates, or any other entities which the appplicant is relying on for the purposes of its application, in the past 10 years in all jurisdictions. Please provide the reasons for the budget and schedule variances for each project.

**a. Budget Variance Table**

All transmission projects that Isolux Infrastructure successfully completed in Brazil are based on fixed transmission rates established through a Competitive Auction Process. Projects are awarded to the lowest bid for annual revenues and bidders accept, under the Concession Contracts, the risk of project cost deviations. Additionally, Isolux Infrastructure typically contracts the EPC for the projects on a lump-sum basis, therefore actual project costs in this jurisdiction are not relevant for purposes of this comparison.

| Name of Project | Details of project | Budgeted cost (MM USD) | Stage of process at which budget created | Actual cost (MM USD) | Variance | Reason for variance |
|---|---|---|---|---|---|---|
| **TOTAL BRAZIL** | | | | | | |
| **ETEE** - Expansion Transmissao de Energia Eletrica | Brazil. 588km of 500kV Transmission Lines and associated substations<br>*COD: 23/12/2002* | 166.85 | Competitive Tender | 166.85 | 0 | Fixed-price EPC and fixed annual revenue model |
| **ETIM** - Expansion Transmissao Itumbiara Marimbondo | Brazil. 212km of 500kV Transmission Lines and associated substations<br>*COD: 20/06/2004* | 90.54 | Competitive Tender | 90.54 | 0 | Fixed-price EPC and fixed annual revenue model |
| **CPTE** - Cachoeira Paulista Transmissora de Energia | Brazil. 181km of 500kV Transmission Lines and associated substations<br>*COD: 28/11/2004* | 98.30 | Competitive Tender | 98.30 | 0 | Fixed-price EPC and fixed annual revenue model |
| **VCTE** - Vila do Conde Transmissora de Energia | Brazil. 324km of 500kV Transmission Lines and associated substations<br>*COD: 09/05/2006* | 147.45 | Competitive Tender | 147.45 | 0 | Fixed-price EPC and fixed annual revenue model |
| **PPTE** - Porto Primavera Transmissora de Energia | Brazil. 515km of 230kV Transmission Lines and 2 associated substations (one 440/230kV 2x450MVA, one 230/138 kV 2x150 MVA)<br>*COD: 17/10/2006* | 186.25 | Competitive Tender | 186.25 | 0 | Fixed-price EPC and fixed annual revenue model |
| **ITE** - Itumbiara Transmissora de Energia | Brazil. 814km of 500kV transmission lines and 3 associated substations (500/230kV 750MVA, 500/230kV 400MVA, 500 kV)<br>*COD: 30/11/2006* | 403.55 | Competitive Tender | 403.55 | 0 | Fixed-price EPC and fixed annual revenue model |
| **SMTE** - Serra da Mesa Transmissora de Energia | Brazil. 681km of 500kV transmission lines and 2 associated substations (500/138kV 2X300MVA, 500 kV)<br>COD: *18/02/2008* | 310.42 | Competitive Tender | 310.42 | 0 | Fixed-price EPC and fixed annual revenue model |
| **LTT** - LT Triangulo | Brazil. 708km of 500kV transmission lines and associated substation (500/345kV 2x900MVA)<br>*COD: 27/11/2008* | 240.58 | Competitive Tender | 240.58 | 0 | Fixed-price EPC and fixed annual revenue model |
| **RPTE** - Riberao Preto Transmissora de Energia | Brazil. 413km of 500kV transmission lines and associated substations<br>*COD: 09/04/2009* | 109.94 | Competitive Tender | 109.94 | 0 | Fixed-price EPC and fixed annual revenue model |
| **SPTE** - Serra Paracatu Transmissora de Energia | Brazil. 246km of 500kV transmission lines and associated substation (500/345 kV 1050MVA, 345/138kV 2x300MVA)<br>*COD: 11/04/2009* | 113.82 | Competitive Tender | 113.82 | 0 | Fixed-price EPC and fixed annual revenue model |
| **PCTE** - Poços de Caldas Transmissora de Energia | Brazil. 308km of 500kV transmission lines and associated substation (500 kV 2x1200 MVA)<br>*COD: 18/09/2009* | 139.69 | Competitive Tender | 139.69 | 0 | Fixed-price EPC and fixed annual revenue model |
| **JTE Sur** - Jauru Transmissora de Energia (South Phase) | Brazil. 345km of 230kV transmission lines and associated substations<br>*COD: 23/10/2009* | 162.55 | Competitive Tender | 162.55 | 0 | Fixed-price EPC and fixed annual revenue model |
| **JTE Norte** - Jauru Transmissora de Energia (Norte Phase) | Brazil. 595km of 230kV transmission lines and associated substations<br>*COD: 08/02/2013* | 135.17 | Competitive Tender | 135.17 | 0 | Fixed-price EPC and fixed annual revenue model |
| **IENNE** - Interligaçao Eletrica Norte e Nordeste | Brazil. 720km of 500kV transmission lines and associated substations<br>*COD: 20/12/2010* | 338.88 | Competitive Tender | 338.88 | 0 | Fixed-price EPC and fixed annual revenue model |
| **LXTE** - Linhas de Xingú Transmissora de Energia | Brazil. 508km of 500kV transmission lines and 2 associated substations (500kV, 500/230kV 2x450 MVA)<br>*COD: 2013 (under construction)* | 664.82 | Competitive Tender | 664,82 (est) | 0 | Fixed-price EPC and fixed annual revenue model |
| **LMTE** - Linhas de Macapá Transmissora de Energia | Brazil. 683km of 500/230kV transmission lines and 3 associated substations (500 kV, 230/69kV 2x100 MVA, 230/69kV 3x150 MVA)<br>*COD: 2013 (under construction)* | 620.84 | Competitive Tender | 620,84 (est) | 0 | Fixed-price EPC and fixed annual revenue model |
| **LTTE** - Linhas de Taubaté Transmissora de Energia | Brazil. 247km of 500kV transmission lines and associated substation (500/345kV 900 MVA, 500/138kV 900 MVA)<br>*COD: 2014 (under construction)* | 181.08 | Competitive Tender | 181,08 (est) | 0 | Fixed-price EPC and fixed annual revenue model |
| **INDIA** | | | | | | |
| **UPPTCL** - Uttar Pradesh Transmission Company | India (Uttar Pradesh). 1600km of 765/400kV transmission lines and 5 associated substations (5730MVA)<br>*COD: 2014 (under construction)* | 1,054 | Competitive Tender | 1.054 (est) | 0 | N/A |
| **USA** | | | | | | |
| **WETT** - Wind Energy Transmission Texas | USA (Texas). 605km of 345kV transmission lines and 6 associated substations<br>*COD: 2013 (under construction)* | 625 | CCN application | 757,00 (est) | N/A | Additional facilities - additional substation; expansion of planned substations for wind interconnections; control center -, special - more costly and scarce - type of towers required by order, labor shortages (4,500+ km of transmission lines and 25+ substations simultaneously under construction in the area, and drain from superstorm Sandy restoration efforts), more costly foundations due to soil condition (rock). |

# APPENDIX D

**(a) Budget Variance Table**

| Name of Project | Details of Project | Budgeted Cost | Stage of process at which budget created | Actual Cost | Variance | Reason for Variance |
|---|---|---|---|---|---|---|
| Fort McKay (NGTL) | NPS 30 / NPS 36<br>2006-2008<br>275 km | $0.38 billion | Definition Phase | $0.38 billion | On budget | Not applicable. |
| North Central Corridor (NGTL) | NPS 42<br>2008-2010<br>300 km | $0.80 billion | Definition Phase | $0.68 billion | 15% under | Planned contingencies did not materialize. |
| Keystone | NPS 30 / NPS 36<br>2010<br>2585 km | $6.0 billion | Definition Phase | $6.72 billion | 12% over | Weather related delays and construction productivity. |
| Tamazunchale (Mexico) | NPS 36<br>2005<br>130 km | $0.2 billion | Definition Phase | $0.18 billion | 10% under | Planned contingencies did not materialize. |
| Guadalajara (Mexico) | NPS 30<br>2011<br>310 km | $0.4 billion | Definition Phase | $0.4 billion | On budget | Not applicable. |
| Bison (US) | NPS 36<br>2010<br>485 km | $0.58 billion | Definition Phase | $0.64 billion | 11% over | Regulatory timeline, weather delays and, construction productivity. |

**(b) Schedule Variance Table**

| Name of Project | Details of Project | Estimated development and construction time | Stage of process at which time estimate was made | Actual development and construction time | Variance | Reason for Variance |
|---|---|---|---|---|---|---|
| Fort McKay (NGTL) | NPS 30 / NPS 36<br>2006-2008<br>275 km | 2006 / 2007 projects: 21 months<br><br>2007 / 2008 projects: 14 months | Proposal phase | 2006 / 2007 projects: 21 months<br><br>2007 / 2008 projects: 14 months | On time | Not applicable. |
| North Central Corridor (NGTL) | NPS 42<br>2008-2010<br>300km | 18 months | Definition Phase | 18 months | On time | Not applicable |
| Keystone | NPS 30 / NPS 36<br>2010<br>2585 km | 50 months | Definition Phase | 50 months | On time | Not applicable. |
| Tamazunchale (Mexico) | NPS 36<br>2005<br>130 km | 18 months | Definition Phase | 18 months | On time | Not applicable. |
| Guadalajara (Mexico) | NPS 30<br>2011<br>310 km | 24 months | Definition Phase | 26 months | 2 months | Scope change. |
| Bison (US) | NPS 36<br>2010<br>485 km | 32 months | Definition Phase | 34 months | 2 months | Regulatory timeline, weather delays and, construction productivity. |

# APPENDIX E

**Rating Report**

**Report Date:**
November 27, 2012

**Previous Report:**
November 25, 2011

Insight beyond the rating.

# TransCanada Corporation and Subsidiaries


**Analysts**

**Michael R. Rao, CFA**
+1 416 597 7541
mrao@dbrs.com

**Eric Eng, MBA**
+1 416 597 7578
eeng@dbrs.com

**James Jung, CFA, FRM, CMA**
+1 416 597 7577
jjung@dbrs.com


**The Company**

(1) **TransCanada PipeLines Limited** is a leading integrated energy services company in North America involved in natural gas and crude oil transmission as well as electricity generation.

(2) **TransCanada Corporation** is TCPL's parent company and holds no material assets other than TCPL's common shares and subsidiaries.

(3) **TransCanada Keystone Pipeline, LP** owns the U.S. portion of Keystone Pipeline, which ships crude oil from Hardisty, Alberta to U.S. Midwest markets.

**Authorized Principal CP Limit**

TCPL: $2.0 Billion
Keystone USA: US$1 Billion (or C$ equivalent)

**Recent Actions**

**November 22, 2012**
Confirmed ratings

**September 14, 2012**
Assigned TCPL Issuer Rating

**July 30, 2012**
New TCPL Debt issue

**February 28, 2012**
New TCPL Debt issue

## Rating

| Debt Rated | Issuing Entity | Rating | Rating Action | Trend |
|---|---|---|---|---|
| Issuer Rating | TransCanada PipeLines Limited | A | Confirmed | Stable |
| Unsecured Debentures & Notes | TransCanada PipeLines Limited | A | Confirmed | Stable |
| Junior Subordinated Notes | TransCanada PipeLines Limited | BBB (high) | Confirmed | Stable |
| Preferred Shares – Cumulative | TransCanada PipeLines Limited | Pfd-2 (low) | Confirmed | Stable |
| Commercial Paper | TransCanada PipeLines Limited | R-1 (low) | Confirmed | Stable |
| Preferred Shares – Cumulative | TransCanada Corporation | Pfd-2 (low) | Confirmed | Stable |
| Commercial Paper* | TransCanada Keystone Pipeline, LP | R-1 (low) | Confirmed | Stable |

* Guaranteed by TransCanada PipeLines Limited and TransCanada PipeLine USA Ltd.

## Rating Update

DBRS has confirmed the ratings of TransCanada PipeLines Limited (TCPL or the Company) as listed above. DBRS has also confirmed the rating of the Preferred Shares of TransCanada Corporation (TCC) at Pfd-2 (low). The rating of TCC, which owns 100% of TCPL and holds no other material assets, is based on the credit strength of TCPL. The R-1 (low) Commercial Paper (CP) rating of TransCanada Keystone Pipeline, LP (Keystone USA), guaranteed by TCPL and its wholly owned subsidiary, TransCanada PipeLine USA, Ltd. (TCPL USA) has also been confirmed. All trends remain Stable.

The ratings and trends reflect the following DBRS expectations: (1) The decision (expected in late Q1 2013) with respect to the Company's Canadian Mainline 2012 Tolls Application and Restructuring Proposal (the Restructuring Proposal) that is currently before the National Energy Board (NEB) will be such that the Company is allowed to continue to recover and earn a reasonable rate of return on all of the costs that were incurred in the construction of the Canadian Mainline. (2) The Keystone XL Pipeline, approval of which has been repeatedly delayed, is approved by the United States Department of State in 2013 (decision expected in Q1) and construction is allowed to proceed, with an expected in-service date in late 2014 or early 2015. Should a negative decision result, DBRS expects TCC to mitigate the result with incremental projects of similar quality to support its overall business risk profile. (3) Despite an expected moderate weakening in 2013, TCPL maintains reasonably strong credit metrics in line with its targeted cash flow-to-debt ratio of at least 15% and cash flow-to-interest of at least three times (15.8% and 3.6 times on a DBRS-adjusted basis at September 30, 2012). DBRS expects increased diversification and reduced proportional exposure to the currently challenging natural gas pipeline segment, with major projects placed in service by 2015 as expected.

While DBRS acknowledges TCC's strong business risk profile, material deviation from the above-noted expectations would likely result in negative rating action for all of the ratings, except for the CP ratings.

## Rating Considerations

**Strengths**

(1) Growth capex supports risk diversification
(2) Regulatory/contractual framework for pipelines
(3) Base-load/long-term contract support in Energy
(4) Reasonable balance sheet and credit metrics

**Challenges**

(1) Uncertainties in natural gas pipeline segment
(2) Volume and/or price risk with some assets
(3) Rising environmental, regulatory, political risk
(4) Potential medium term pressure on credit metrics

## Financial Information

| | US GAAP | US GAAP | US GAAP | US GAAP | Cdn GAAP | Cdn GAAP | Cdn GAAP |
|---|---|---|---|---|---|---|---|
| **TransCanada Corporation** | 9 mos. ended Sept. 30 | | 12 mos. ended | For the year ended December 31 | | | |
| (CAD millions where applicable) | 2012 | 2011 | Sept. 30, 2012 | 2011 | 2011 | 2010 | 2009 |
| Net income before extras | 1,053 | 1,235 | 1,399 | 1,581 | 1,620 | 1,406 | 1,331 |
| Cash flow (bef. working capital changes) | 2,466 | 2,614 | 3,301 | 3,449 | 3,663 | 3,331 | 3,080 |
| Total debt in capital structure | 51.7% | 52.2% | 51.7% | 51.8% | 52.7% | 53.5% | 53.1% |
| Cash flow/total debt | 15.7% | 16.4% | 15.8% | 16.4% | 16.8% | 15.6% | 15.5% |
| Cash flow interest coverage | 3.58 | 3.84 | 3.60 | 3.80 | 3.84 | 3.59 | 3.27 |
| EBITDA interest coverage (times) | 3.38 | 3.70 | 3.47 | 3.71 | 3.73 | 3.06 | 3.02 |
| EBIT interest coverage (times) | 2.30 | 2.63 | 2.39 | 2.63 | 2.55 | 2.01 | 2.01 |

## Rating Update Details

DBRS views the above-noted expectations as important in maintaining the current ratings, for the following reasons:

(1) Despite continuing decline in the Canadian Mainline's contribution to TCC's earnings and EBITDA (13% and 23%, respectively, in the nine months ending September 30, 2012 (9M 2012), compared with 21% and 27%, respectively, in 2009), it remains an important contributor to TCC's overall credit profile. Any material change to its cost recovery and rate of return methodology would be an indication of increased business risk and would raise similar concerns with respect to other NEB-regulated entities that could face similar issues in the future, including those owned by TCC.

(2) DBRS considers the approval, construction and placement into service of Keystone XL (included in TCC's Oil Pipelines segment – see below) to be an important component of the projected improvement of TCC's current business risk profile. TCC projects that between 2011 and 2015 its EBITDA will grow by 36% from $4.5 billion to $6.1 billion, with the increase to be derived from the following sources: Canadian Pipelines (31%; down from 42%), Oil Pipelines (30%; up from 13%), Energy & Corporate (22%; down from 24%) and U.S. & Mexico Gas Pipelines (17%; down from 21%). In the absence of Keystone XL, DBRS would expect TCC to mitigate the result with incremental projects of similar quality to support its overall business risk profile.

(3) TCC's financial profile remains reasonable, as capex has been lower than previously anticipated due to the Keystone XL delay, partly offsetting weaker earnings and cash flow in 9M 2012. DBRS believes that the weakness in credit metrics in 9M 2012, compared with prior periods, was partly due to factors that are not likely to reoccur on an ongoing basis, including the Sundance A power purchase agreement (PPA) *force majeure*, the increased planned outage days at Bruce Power's Unit A3 and A4 and the lower-than-expected capacity payments at the Ravenswood natural gas and oil-fired generating facility. DBRS notes that Bruce Power's Unit 1 and Unit 2 were both placed into commercial service during Q4 2012 following a significant refurbishment program. TCC has a large capex program ($6.5 billion in 2013, $4 billion in 2014 and $2.5 billion in 2015) that it expects to fund with a combination of retained cash flow ($7.5 billion) and senior debt and subordinated capital issuance ($5.5 billion). The Company will likely experience a significant free cash flow deficit in 2013 as capex on Keystone XL gets underway, likely resulting in a moderately negative impact on credit metrics prior to improvement starting in 2014, as some projects are placed into service and begin to generate cash flow. DBRS expects TCPL's credit metrics to subsequently improve modestly and to remain within the current rating category.

## Rating Considerations Details

**Strengths**

(1) TCPL's large capex program (see *Major Projects* and *Earnings and Outlook*) supports risk diversification as the Company expands its presence in the lower risk crude oil pipeline segment and reduces its proportional exposure to the currently challenged natural gas pipeline segment in Canada and the United States. The growth projects are largely contracted with good counterparties and also reduce the proportion of its EBITDA that is exposed to commodity price risk from already relatively low levels. TCPL's ownership of one of the largest integrated natural gas pipeline networks in North America should allow it to adapt to changing supply/demand dynamics by offering complementary and/or additional services over time.

(2) Despite recent challenges (see below), the Company has benefitted from the regulatory and/or contractual framework within its pipeline segments, which have typically accounted for approximately 65% to 75% of its EBITDA. Both the NEB and the FERC (although to a lesser extent) have been supportive in providing the regulatory framework necessary for pipelines to recovery their costs and the opportunity to earn an adequate return on equity over a reasonable time frame.

(3) TCPL's Energy segment benefits from its weighting toward base-load power and long-term contractual arrangements. A substantial proportion of the EBITDA from TCPL's energy segment is protected by long-term power contracts with creditworthy parties (e.g., Ontario Power Authority (OPA) and Hydro-Québec, both rated A (high)). In addition, most of its 2,100 MW capacity in Alberta is from base-load coal-fired generation under PPAs.

(4) The Company's financial profile remains reasonable for its business risk profile, as capex has been lower than previously anticipated due to the Keystone XL delay (please see *Financial Profile*).

**Challenges**

(1) TCPL is facing challenges in its Canadian and U.S. natural gas pipeline segments related to changing gas flows as a result of the emergence of large-scale shale gas production, particularly in various regions in the U.S., which has resulted in depressed continental gas prices. This trend in turn has had a disproportionately negative impact on the Canadian Mainline's volumes, thereby driving up tolls under the cost-of-service methodology to levels that result in minimal netbacks for natural gas producers. TCPL's Restructuring Proposal, if approved, would result in significant changes to the business structure and terms and conditions of service of the Canadian Mainline, but would retain the concept that pipelines would continue to recover all costs and a reasonable rate of return. DBRS believes that similar issues could develop with respect to certain natural gas pipelines in the United States over the medium term.

(2) The Company faces volume and/or commodity price risk within some of its assets. For example, its U.S. natural gas pipelines retain some volume risk, although usually limited to certain components of toll revenue. Base Keystone has an uncontracted component, although relatively small, while much of the Energy segment has some exposure to volume risk and Western Power and U.S. Power retain some commodity price risk. The Company hedges certain of its commodity price and foreign exchange risk on an ongoing basis.

(3) TCPL faces environmental, regulatory and political risks with respect to its pipeline operations and expansion into the U.S. Gulf Coast. Its Keystone XL project has been repeatedly delayed while its Canadian Mainline Restructuring Proposal faces regulatory risk. These issues raise the possibility that future pipeline project development could entail longer lead times and construction costs than previously experienced.

(4) The Company will likely experience a significant free cash flow deficit in 2013 as capex on Keystone XL gets underway. This will likely have a moderately negative impact on credit metrics prior to improvement starting in 2014 as some projects are placed into service and begin to generate cash flow. Key credit metrics targeted by TCC are cash flow-to-debt of at least 15% and cash flow-to-interest of at least three times. Based on higher cash flow expected from newly completed pipeline projects, DBRS expects TCPL's credit metrics to improve modestly in the medium term and remain within the current rating category.

**TransCanada Corporation and Subsidiaries**

**Report Date:**
November 27, 2012

## Regulation – Canadian Mainline and Alberta System

*Canadian Mainline*

- The Canadian Mainline is regulated by the National Energy Board (NEB) on a cost-of-service basis with distance-based tolls that are protected from short-term throughput risk.
- Performance-based incentive arrangements, including cost savings on operation, maintenance and administration (OM&A) expenses accrued to TCPL, expired at year-end 2011, with all other costs such as interest expense flowing through 100% to the shippers.
- Deemed common equity remains at 40%, unchanged from the 2010 level.
- The NEB decreased the Canadian Mainline return on common equity (ROE) from 8.52% in 2010 to 8.08% in 2011, a level that remains in effect in 2012 interim tolls.
- The average investment base continues to decline ($5.75 billion in 9M 2012 compared with $6.25 billion in 9M 2011 and $7.5 billion in 2006) due to the nature of its rate regulation and minimal growth capex.
- The recently completed Marcellus Facilities Expansion project is currently transporting approximately 400 mmcf/d of Marcellus shale gas to eastern markets.

In September 2011, TCPL filed the Canadian Mainline 2012 Tolls Application and Restructuring Proposal (the Restructuring Proposal), which, if approved, would result in significant changes to the business structure and terms and conditions for service of the Canadian Mainline:

- Extension of TCPL's Alberta System footprint to points on the Canadian Mainline in Saskatchewan, and on the Foothills System in Saskatchewan and British Columbia, thereby reducing the cost to transport gas from western Canada to markets served by the Canadian Mainline.
- Lower depreciation expense and therefore lower tolls for the three Canadian Mainline segments combined with a reallocation of accumulated depreciation balances for each segment.
- Changes to toll design, services and pricing resulting in higher revenues and lower overall tolls.
- A 7.0% ATWACC return, equivalent to an allowed ROE of 12% on a 40% deemed equity component.

As part of the Canadian Mainline hearing that began in June 2012, TCPL filed supplementary information with respect to the cost of service and the proposed tolls for 2012 and 2013.

- If approved, the resulting 2012 toll for transportation from Nova Inventory Transfer (NIT) to the Dawn, Ontario, delivery point would be reduced significantly compared with the 2011 toll of $2.10 per gigajoule.
- An NEB decision regarding the Restructuring Proposal is expected in late Q1 2013.

*Alberta System*

- The Alberta System currently operates under the 2010–2012 Revenue Requirement Settlement (2010–2012 RRS) approved by its regulator, the NEB, in September 2010.
- The 2010–2012 RRS established an ROE of 9.70% (2009: 8.75%) on deemed common equity of 40% (2009: 35%) and included an annual fixed amount of $174 million for certain OM&A costs.
- Variances between actual costs and agreed-to OM&A costs accrue to NOVA Gas Transmission Ltd. (NGTL) over the three-year term. All other cost elements of the revenue requirement are passed through to the shippers.
- Under the 2010–2012 RRS, NGTL's earnings and cash flow are mainly driven by (1) investment rate base; (2) deemed equity, (3) ROE and (4) incentive earnings (operational efficiency which is measured against the annual fixed amount of certain OM&A that was agreed upon in the settlement).
- While ROE has remained stable at 9.70%, the Alberta System's average investment base has increased ($5.4 billion in 9M 2012 compared with $5.0 billion in 9M 2011 and $4.2 billion in 2008), reflecting higher capital investment on new pipeline projects, a trend that is expected to continue in the near to medium term.
- Under the Restructuring Proposal, NGTL would contract for (1) Mainline firm service from Empress to the Saskatchewan/Manitoba border; and (2) Foothills System firm service from Alberta/British Columbia border to Kingsgate (border to Montana), and from McNeill (Alberta) to Monchy (Saskatchewan, border to Montana). NGTL would use this capacity to provide integrated services on its AB System and would include capacity costs in its revenue requirement.
- The Alberta System is currently using 2012 interim tolls based on the 2010–2012 RRS.

**TransCanada Corporation and Subsidiaries**

**Report Date:**
November 27, 2012

## Earnings and Outlook

- TCC's conversion to U.S. Generally Accepted Accounting Principles (GAAP) from Canadian GAAP resulted in minimal impact on net income before extras (DBRS-adjusted) in 2011.

| **TransCanada Corporation** | **US GAAP** | **US GAAP** | **US GAAP** | **US GAAP** | **Cdn GAAP** | **Cdn GAAP** | **Cdn GAAP** |
|---|---|---|---|---|---|---|---|
| **Income Statement** | 9 mos. ended Sept. 30 | | 12 mos. ended | For the year ended December 31 | | | |
| (Cdn$ millions) | 2012 | 2011 | Sept. 30, 2012 | 2011 | 2011 | 2010 | 2009 |
| Canadian Natural Gas Pipelines | 1,410 | 1,475 | | | 1,977 | 1,981 | 2,052 |
| U.S. & International Natural Gas Pipelines | 666 | 721 | | | 1,042 | 999 | 1,105 |
| Business Development Costs | (25) | (37) | | | (52) | (65) | (64) |
| Natural Gas Pipes EBITDA before extras | 2,051 | 2,160 | | | 2,967 | 2,915 | 3,093 |
| Oil Pipelines EBITDA before extras | 526 | 408 | | | 587 | 0 | 0 |
| Energy EBITDA before extras | 681 | 913 | | | 1,338 | 1,125 | 1,131 |
| **Segment EBITDA before extras** | 3,258 | 3,481 | | | 4,892 | 4,040 | 4,224 |
| Corporate and other | (29) | (78) | | | (86) | (99) | (117) |
| EBITDA before extras | 3,229 | 3,403 | 4,400 | 4,574 | 4,806 | 3,941 | 4,107 |
| Depreciation & amortization | (1,032) | (987) | (1,373) | (1,328) | (1,528) | (1,354) | (1,377) |
| EBIT before extras | 2,197 | 2,416 | 3,027 | 3,246 | 3,278 | 2,587 | 2,730 |
| Interest expense, net | (730) | (688) | (973) | (931) | (986) | (701) | (1,001) |
| Net income before extras and taxes | 1,467 | 1,728 | 2,054 | 2,315 | 2,292 | 1,886 | 1,729 |
| Other income | (60) | (23) | (196) | (159) | (77) | (80) | 8 |
| Income taxes recovered (paid) | (354) | (470) | (459) | (575) | (595) | (400) | (406) |
| **Net Income before extraordinary items** | **1,053** | **1,235** | **1,399** | **1,581** | **1,620** | **1,406** | **1,331** |
| Extraordinary items | (19) | (44) | 25 | 0 | (38) | (134) | 49 |
| Reported net income | 1,034 | 1,191 | 1,424 | 1,581 | 1,582 | 1,272 | 1,380 |
| **Segment EBITDA Breakdown** | | | | | | | |
| % Canadian Natural Gas Pipelines | 43% | 42% | | | 40% | 49% | 49% |
| % U.S. & International Natural Gas Pipes | 20% | 21% | | | 21% | 25% | 26% |
| % Natural Gas Pipelines | 63% | 62% | | | 61% | 72% | 73% |
| % Oil Pipelines | 16% | 12% | | | 12% | 0% | 0% |
| % Energy | 21% | 26% | | | 27% | 28% | 27% |

Net income (before extras) dropped by $182 million (15%) in 9M 2012 compared with 9M 2011, mainly due to lower earnings from Natural Gas Pipelines and Energy, partly offset by higher earnings from Oil Pipelines and lower income tax expense (see *Business Segment Analysis* for more detailed EBITDA breakdown).

- Canadian Natural Gas Pipelines earnings and EBITDA fell by 13% and 4%, respectively, primarily due to lower results on the Canadian Mainline from the absence of incentive earnings and a lower investment base.
- U.S. and International Natural Gas Pipelines EBIT and EBITDA fell by 11% and 8%, respectively, primarily due to lower revenue on Great Lakes (due to lower rates and volumes) and ANR, partly offset by incremental earnings from the Guadalajara pipeline, which was placed in service in June 2011.
- Oil Pipelines EBIT and EBITDA rose by 33% and 29%, respectively, primarily due to a full period of earnings from Base Keystone, which was placed in service in February 2011, higher final fixed tolls for the Cushing Extension and the Wood River/Patoka sections as well as higher volumes.
- Energy EBIT and EBITDA fell by 35% and 25%, respectively, due to a number of factors including (a) the Sundance A PPA *force majeure*; (b) increased planned outage days at Bruce Power (see *Business Segment Analysis*); (c) reduced waterflows at U.S. hydro facilities and (d) lower Natural Gas Storage revenue. These factors were partly offset by higher contributions from Eastern Power and incremental wind power earnings.

### Outlook

- DBRS expects earnings growth in the near to medium term (see Major Capital Projects).
- Incremental earnings from these new assets should mitigate lower Canadian Mainline and Foothills pipeline earnings as a result of declining rate bases and the potential for continued earnings weakness in U.S. Natural Gas Pipelines, Canadian Power and U.S. Power.
- TCC projects that, between 2011 and 2015, its EBITDA will grow by 36% from $4.5 billion to $6.1 billion, which will be derived from the following sources: Canadian Pipelines (31%; down from 42%), Oil Pipelines (30%; 13%), Energy & Corporate (22%; 24%) and U.S. & Mexico Gas Pipelines (17%; 21%).
- DBRS believes that this would represent an improvement from TCC's current business risk profile.

## Financial Profile

TCC's conversion to U.S. GAAP from Canadian GAAP resulted in modest financial statement impacts.

- A $379 million (2%) reduction in common equity effective January 1, 2011, due to the recognition of a pension liability adjustment, net of income taxes, within accumulated other comprehensive income. The impact of this adjustment was a $530 million (3%) drop in common equity at December 31, 2011.
- There was a modest impact on other amounts due to the change from proportional consolidation to equity accounting for certain partially owned entities. However, the impact on credit metrics was relatively minor.

| | US GAAP | US GAAP | US GAAP | US GAAP | Cdn GAAP | Cdn GAAP | Cdn GAAP |
|---|---|---|---|---|---|---|---|
| **TransCanada Corporation** | 9 mos. ended Sept. 30 | | 12 mos. ended | For the year ended December 31 | | | |
| (CAD millions) | 2012 | 2011 | Sept. 30, 2012 | 2011 | 2011 | 2010 | 2009 |
| Net income before extras | 1,053 | 1,235 | 1,399 | 1,581 | 1,620 | 1,406 | 1,331 |
| Depreciation and amortization | 1,032 | 987 | 1,373 | 1,328 | 1,528 | 1,354 | 1,377 |
| Deferred income taxes, AEDC and other | 381 | 392 | 529 | 540 | 515 | 571 | 372 |
| **Cash Flow from Operations** | 2,466 | 2,614 | 3,301 | 3,449 | 3,663 | 3,331 | 3,080 |
| Capex and equity investments | (2,112) | (2,044) | (3,195) | (3,127) | (3,274) | (5,036) | (5,417) |
| Common and preferred dividends paid | (994) | (948) | (1,328) | (1,282) | (1,282) | (1,161) | (1,010) |
| Gross free cash flow (before work. cap.) | (640) | (378) | (1,222) | (960) | (893) | (2,866) | (3,347) |
| Changes in non-cash working capital items | 80 | 145 | 245 | 310 | 310 | (249) | (90) |
| **Gross Free Cash Flow** | (560) | (233) | (977) | (650) | (583) | (3,115) | (3,437) |
| Business acquisitions, net of cash | 0 | 0 | 0 | 0 | 0 | 0 | (902) |
| Proceeds on sale of inv. and other assets | 63 | 145 | (78) | 4 | (8) | (392) | (704) |
| **Net Free Cash Flow** | (497) | (88) | (1,055) | (646) | (591) | (3,507) | (5,043) |
| Inc. (dec.) in debt and equivalents | 365 | (630) | 1,127 | 132 | 78 | 2,274 | 1,998 |
| Inc. (dec.) in equity and equivalents | (28) | 515 | (29) | 514 | 514 | 1,000 | 2,734 |
| Inc. (dec.) in other | 0 | 0 | (6) | (6) | 0 | 0 | 0 |
| Dec. (inc.) in cash balances | 160 | 203 | (37) | 6 | (1) | 233 | 311 |
| **Funding Sources** | 497 | 88 | 1,055 | 646 | 591 | 3,507 | 5,043 |
| Total debt in capital structure | 51.7% | 52.2% | 51.7% | 51.8% | 52.7% | 53.5% | 53.1% |
| Cash flow/total debt | 15.7% | 16.4% | 15.8% | 16.4% | 16.8% | 15.6% | 15.5% |
| Cash flow interest coverage | 3.58 | 3.84 | 3.60 | 3.80 | 3.84 | 3.59 | 3.27 |
| EBIT interest coverage (times) | 2.30 | 2.63 | 2.39 | 2.63 | 2.55 | 2.01 | 2.01 |
| Fixed-charges coverage (times) | 2.18 | 2.48 | 2.25 | 2.48 | 2.41 | 1.92 | 2.00 |

TCC's financial profile remains reasonable for its business risk profile as capex has been lower than previously anticipated (due to the Keystone XL delay), partly offsetting weaker earnings and cash flow in 9M 2012. The Company's significant common and preferred share issuance in 2009–2011 has supported its leverage ratios.

- Cash flow from gas pipelines, although relatively predictable, declined in 9M 2012. Similarly, cash flow from the power business, although less predictable than from gas pipelines and largely protected by long-term contracts, also declined for a variety of reasons in 9M 2012 (see Earnings and Outlook).
- Weaker earnings, combined with the 2009–2011 equity issuances, resulted in a higher dividend payout ratio in 9M 2012 (92% of net income before extras; 78% in 2011).
- DBRS believes that the weakness in credit metrics in 9M 2012 compared with prior periods was partly due to factors that are not likely to be repeated on an ongoing basis, including the Sundance A PPA force majeure and the increased planned outage days at Bruce Power.

### Outlook

- TCC has a large capex program ($6.5 billion in 2013, $4 billion in 2014 and $2.5 billion in 2015 – see Major Capital Projects) that it expects to fund with a combination of retained cash flow ($7.5 billion) and senior debt and subordinated capital issuance ($5.5 billion).
- The Company will likely experience a significant free cash flow deficit in 2013 as capex on Keystone XL gets under way, likely resulting in a moderately negative impact on credit metrics prior to improvement starting in 2014 as some projects are placed into service and begin to generate cash flow.
- Key credit metrics targeted by TCC are cash flow-to-debt of at least 15% and cash flow-to-interest of at least three times. TCC projects that, between 2011 and 2015, its cash flow will grow to $4.5 billion.
- Combined with higher cash flow expected from newly completed pipeline projects, DBRS expects TCPL's credit metrics to improve modestly and remain within the current rating category.

## Bank Lines and Long-Term Debt Maturities

At September 30, 2012, TCPL and its consolidated subsidiaries had $4.3 billion of combined committed, revolving credit facilities, of which $1.5 billion was mostly allocated to backstop commercial paper (CP).

- TCPL has a $2.0 billion facility maturing in October 2017 to backstop its CP program.
- Keystone USA has a US$1.0 billion facility, guaranteed by TCPL and TCPL USA, maturing in November 2013 to backstop its CP program.
- TCPL USA has a US$1.0 billion facility, guaranteed by TCPL, maturing in October 2013 to backstop its CP program.
- TCPL USA has a US$0.3 billion facility, guaranteed by TCPL, maturing in February 2013.

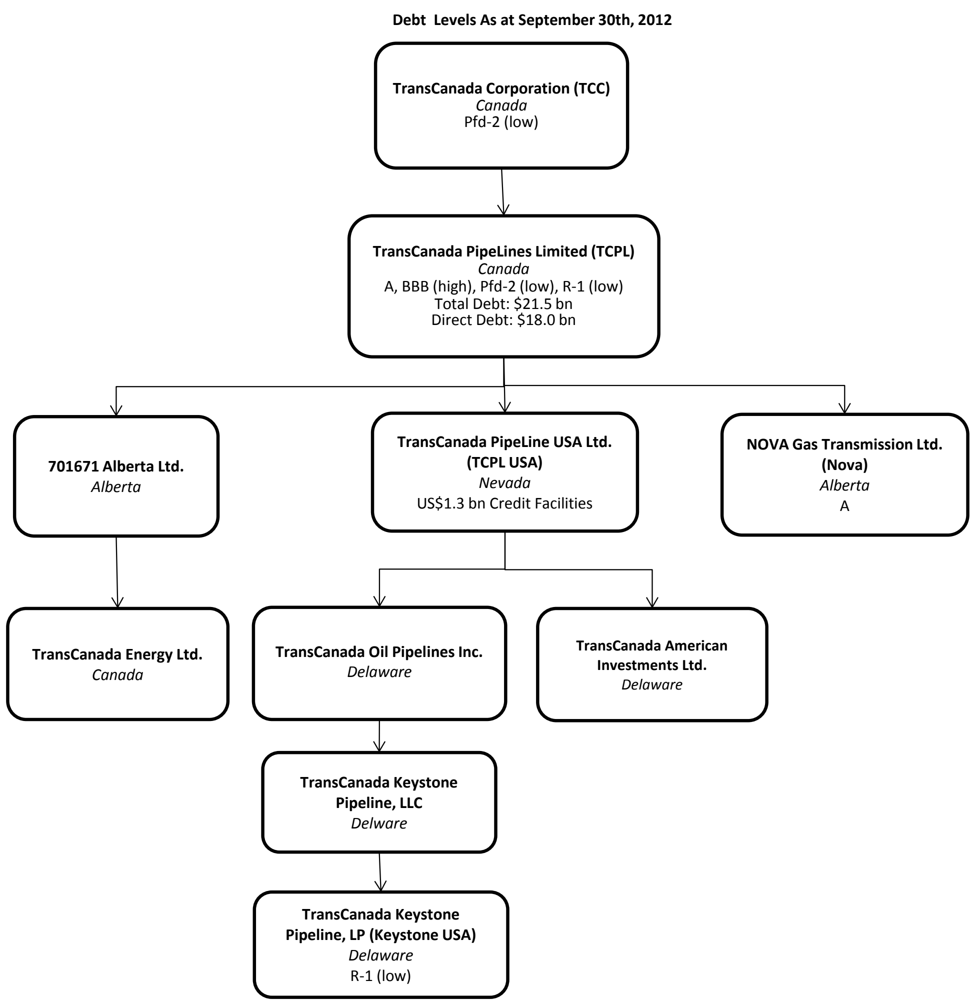
**Long-Term Debt Maturities**

| **As at September 30, 2012** | Q4 2012 | 2013 | 2014 | 2015 | 2016+ | Total |
|---|---|---|---|---|---|---|
| Long-term debt ($ billions) | 0.2 | 0.9 | 1.0 | 1.5 | 15.5 | 19.0 |
| % of long-term debt | 0.9% | 4.5% | 5.4% | 7.6% | 81.5% | 100.0% |

Excludes $1.5 billion of CP backstopped by various credit faciilties.

- Debt maturities are well spread out, and well within the Company's ability to refinance, although significant new issuance is expected over the medium term in order to fund the large capex program.

## Corporate Structure



## Major Capital Projects

The following major capital projects, which are expected to be in service by 2015, should further diversify TCC's operations and result in an improved overall business risk profile.

| **Major Capital Projects Expected to be In-Service by 2015** ($ billions) | Capital Cost | Invested to Date | Expected In-Service Date | Revenue Stream |
|---|---|---|---|---|
| Bruce Power (Unit 1 & Unit 2) | 2.4 | 2.4 | Completed | Fully contracted |
| Cartier Wind (Phase V) | 0.1 | 0.1 | Completed | Fully contracted |
| Alberta System | 1.7 | 0.7 | 2012-2014 | Cost of Service |
| Gulf Coast Project | 2.3 | 0.9 | late 2013 | Contracted / Spot |
| Keystone XL and Bakken Marketlink | 5.4 | 1.6 | late 2014/early 2015 | Largely contracted |
| Keystone Hardisty Terminal | 0.3 | 0.0 | late 2014 | Largely contracted |
| Ontario Solar | 0.5 | 0.0 | 2013-2014 | Fully contracted |
| Tamazunchale Extension | 0.5 | 0.0 | 2014 | Fully contracted |
| **Total** | **13.2** | **5.7** | | |

*Bruce Power (Unit 1 and Unit 2) Restart Project*

- The recently completed refurbishment and return to service has extended the expected life of these nuclear generation plants in Ontario until at least 2037. In addition, Bruce expects to extend the operating life of Unit 4 to at least 2021, aligning it with Unit 3, a process that is expected to conclude in late Q4 2012. Capacity has been fully contracted with the OPA.

*Cartier Wind (Phase V)*

- The 111 MW second phase of Gros-Morne recently became operational, completing the 590 MW Cartier Wind project in Quebec. All power produced by Cartier Wind is sold under 20-year PPAs to Hydro-Quebec.

*Alberta System*

- During 9M 2012, 12 separate pipeline projects with a total cost of $680 million were placed in service, including the Horn River project that connected the Horn River Basin to the Alberta System in May 2012.
- The NEB has approved $630 million of additional expansions and extensions with approximately $340 million of projects awaiting NEB approval.
- All of these projects are included in the Alberta System's cost of service regulatory framework.

*Gulf Coast Project*

- In August 2012, TCC started construction on the project, which will extend from Cushing, Oklahoma, to the U.S. Gulf Coast and is expected to have an initial crude oil capacity of up to 700,000 b/d with an ultimate capacity of 830,000 b/d. The Houston Lateral pipeline will transport crude oil to Houston area refineries.
- A portion of the volumes will be delivered on a spot market basis until the contractual arrangements under the Keystone XL project (see below) come into force. Given the supply glut at Cushing, the Gulf Coast pipeline is likely to attract significant volumes during the period during which it operates on a spot basis.

*Keystone XL and Bakken Marketlink*

- The original Keystone XL project (which included the Gulf Coast Project until late 2011) was originally scheduled to receive regulatory approval in 2011. The revised Keystone XL would extend from Hardisty, Alberta through the U.S./Canada border in Montana to Steele City, Nebraska.
- The U.S. Department of State (DOS) is currently reviewing the Presidential Permit application (to be supplemented by an environmental report on the preferred alternative pipeline route through the State of Nebraska) for the pipeline and expects to reach a decision on the project in 2013.
- Keystone XL is expected to have an initial capacity of 830,000 b/d with more than 500,000 b/d contracted for an average term of 18 years. These contracts would also apply to the Gulf Coast Project.
- Bakken Marketlink is supported by five-year shipper contracts totalling 65,000 b/d to transport shale crude oil from Montana to Oklahoma, using facilities that form part of Keystone XL.

*Keystone Hardisty Terminal*

- The 2.6 million barrel terminal will provide new crude oil batch accumulation tankage and pipeline infrastructure and access to the Keystone Pipeline System and is supported by secured binding long-term commitments exceeding 500,000 b/d.

*Ontario Solar*

- Ontario Solar is comprised of nine solar power projects with a total capacity of 86 MW. All power produced by Ontario Solar is sold under a 20-year PPA with the OPA.

*Tamazunchale Extension*

- Tamazunchale Extension is a natural gas pipeline project to be built in Mexico that will connect with the TCC's existing Tamazunchale Pipeline, both of which are supported by 25-year contracts with the Mexico's state owned power utility.

The following major capital projects were secured during 2012 and are expected to be in service post 2015.

| **Commercially Secured Projects Expected to be In-Service Post 2015** ($ billions) | Capital Cost | Expected In-Service Date | Revenue Stream | Counterparty |
|---|---|---|---|---|
| Topolobampo Pipeline (Mexico) | 1.0 | Q3 2016 | Fully contracted | CFE |
| Mazatlan Pipeline (Mexico) | 0.4 | Q4 2016 | Fully contracted | CFE |
| Northern Courier Pipeline (Alberta) | 0.7 | 2016 | Fully contracted | Suncor Consortium |
| Grand Rapids Pipeline (Alberta) | 1.5 | 2017 | Contracted / Spot | Phoenix |
| Napanee Generating Station (Ontario) | 1.0 | 2017 | Fully contracted | OPA |
| Coastal GasLink Pipeline (B.C.) | 4.0 | 2018+ | Fully contracted | Shell Consortium |
| **Total** | **8.6** | | | |

*Topolobampo Pipeline*

- Topolobampo is a natural gas pipeline project to be built in Mexico with a contracted capacity of 670 mmcf/d. The pipeline is supported by a 25-year contract with the Mexico's state-owned power utility.

*Mazatlan Pipeline*

- Mazatlan is a natural gas pipeline project to be built in Mexico with a contracted capacity of 202 mmcf/d. The pipeline is supported by a 25-year contract with the Mexico's state-owned power utility and will interconnect with Topolobampo Pipeline.

*Northern Courier Pipeline*

- Northern Courier is a proposed bitumen and diluent pipeline project between the Fort Hills mine site and the Voyageur Upgrader located north of Fort McMurray, Alberta.
- The pipeline is supported by long-term contracts to service the Fort Hills mine, which is jointly owned by Suncor Energy Inc, Total E&P Canada Ltd. and Teck Resources Limited.
- Northern Courier is conditional on and subject to the Fort Hills project receiving sanction by its co-owners and obtaining regulatory approval, timing of which is currently uncertain.

*Grand Rapids Pipeline*

- TCC and Phoenix Energy Holdings Limited (Phoenix) will each own 50% of the Grand Rapids Pipeline Project, which includes crude oil and diluent pipelines between the producing area northwest of Fort McMurray and the Edmonton/Heartland region of Alberta.
- Grand Rapids is supported by a long-term commitment by Phoenix to ship crude oil and diluent on the system and is subject to regulatory approvals.

*Napanee Generating Station*

- Napanee Generating Station is a proposed natural gas-fired 900 MW combined-cycle power plant to be located in Eastern Ontario as a replacement for the cancelled Oakville plant. Definitive contracts are expected to be executed by mid-December 2012, including a 20-year contract with the OPA.

*Coastal GasLink Pipeline*

- TCC has been selected by Shell Canada Limited (Shell) and its partners to design, build, own and operate the proposed Coastal GasLink Pipeline Project that would transport natural gas from the Montney gas-producing region near Dawson Creek, B.C., to the recently announced LNG Canada liquefied natural gas export facility near Kitimat, B.C.
- A proposed contractual extension of the Alberta System using Coastal GasLink would allow TCC to also offer service to interconnecting natural gas pipelines serving the west coast of Canada.
- TCC expects to undertake an open season process in early 2013 to gauge interest in Coastal GasLink.

## Business Segment Analysis

- TCPL's operations are focused in three segments: natural gas pipelines, oil pipelines and energy.
- TCC projects that, between 2011 and 2015, its EBITDA will grow by 36% from $4.5 billion to $6.1 billion, which will be derived from the following sources: Canadian Pipelines (31%; down from 42%), Oil Pipelines (30%; 13%), Energy & Corporate (22%; 24%) and U.S. & Mexico Gas Pipelines (17%; 21%).

### (1) Natural Gas Pipelines

TCPL's network of more than 57,000 kilometres (km) or 35,500 miles of wholly owned pipelines and 11,500 km (7,160 miles) of partially owned pipelines have access to virtually all major gas supply basins in North America. Business risk characteristics and recent developments at major subsidiaries are described below.

(a) Natural Gas Pipelines - Canada

*Canadian Mainline*

- The Canadian Mainline extends 14,101 km (8,762 miles) from the Alberta/Saskatchewan border to the Quebec/Vermont border and connects with other pipelines both in Canada and the United States.
- Natural gas throughput volumes on the Canadian Mainline continue to decline (western receipts averaged 2.4 Bcf/d in 9M 2012 compared with 3.3 Bcf/d in 9M 2011 and 4.3 Bcf/d in 2009) largely due to rising North American (especially U.S.) supply and demand changes that have backed up Alberta gas, culminating in TCPL's Canadian Mainline Restructuring Proposal (see *Regulation* section).
- Canadian Mainline earnings and EBITDA fell by 25% and 7%, respectively in 9M 2012 compared with 9M 2011, primarily due to ongoing investment base decline and the absence of incentive earnings in 9M 2012.
- As a result of the above-noted factors and growth in TCC's remaining assets, the Canadian Mainline's share of TCC's earnings and EBITDA has declined to 13% and 23%, respectively in 9M 2012, from 19% and 27%, respectively in 2009.

*Alberta System*

- The Alberta System Pipeline connects the Canadian Mainline and Foothills pipelines along with third-party natural gas pipelines through 24,373 km (15,145 miles) of pipeline.
- Natural gas throughput volumes on the Alberta System continue to recover (field receipts averaged 10.0 Bcf/d in 9M 2012 compared with 9.7 Bcf/d in 9M 2011 and 9.5 Bcf/d in 2010), largely due to rising western Canadian shale gas production and recently completed expansion projects on the Alberta System.
- Consequently, Alberta System earnings and EBITDA were relatively flat in 9M 2012 compared with 9M 2011, with ongoing capital projects likely to provide modest increases, although subject to the NEB's decision with respect to TCC's Canadian Mainline Restructuring Proposal (see *Regulation* section) and its own settlement discussions with shippers with respect to post-2012 tolls.

*Foothills System*

- Transporting natural gas from central Alberta to the U.S. border, Foothills consists of a 1,241 km (771 mile) transmission system, which serves markets in the U.S. Midwest, Pacific Northwest, California and Nevada.
- Tolls on Foothills are determined based on a 2010 settlement agreement that established a 9.70% allowed ROE on deemed equity of 40% for 2010 to 2012.
- As with the Alberta System, Foothills tolls could also be affected by the NEB's decision with respect to TCC's Canadian Mainline Restructuring Proposal (see *Regulation* section).

**TransCanada Corporation and Subsidiaries**

**Report Date:**
November 27, 2012

| **TransCanada Corporation** | **US GAAP** | | **US GAAP** | | **Cdn. GAAP** | | **Cdn. GAAP** | | **Cdn. GAAP** | |
|---|---|---|---|---|---|---|---|---|---|---|
| **EBITDA by Segment (CAD millions)** | 9 mos. ended Sept. 30 | | | | Year ended December 31 | | | | | |
| **Natural Gas Pipelines** | 2012 | | 2011 | | 2011 | | 2010 | | 2009 | |
| Canadian Mainline | 744 | 23% | 796 | 23% | 1,058 | 22% | 1,054 | 26% | 1,133 | 27% |
| Alberta System | 554 | 17% | 557 | 16% | 742 | 15% | 742 | 18% | 728 | 17% |
| Foothills | 90 | 3% | 96 | 3% | 127 | 3% | 135 | 3% | 132 | 3% |
| Other (TQM, Ventures LP) | 22 | 1% | 26 | 1% | 50 | 1% | 50 | 1% | 59 | 1% |
| **Cdn Gas Pipe EBITDA bef. Extras** | 1,410 | 43% | 1,475 | 42% | 1,977 | 40% | 1,981 | 49% | 2,052 | 49% |
| ANR EBITDA | 191 | 6% | 228 | 7% | 309 | 6% | 325 | 8% | 346 | 8% |
| GTN EBITDA | 84 | 3% | 103 | 3% | 130 | 3% | 177 | 4% | 196 | 5% |
| Great Lakes EBITDA | 51 | 2% | 79 | 2% | 100 | 2% | 113 | 3% | 138 | 3% |
| TC Pipelines, LP EBITDA | 57 | 2% | 63 | 2% | 100 | 2% | 102 | 3% | 104 | 2% |
| Other (incl. G&A, non-controlling int) | 283 | 9% | 248 | 7% | 404 | 8% | 282 | 7% | 321 | 8% |
| **U.S. & Int. Gas Pipe EBITDA bef. Extras** | 666 | 20% | 721 | 21% | 1,042 | 21% | 999 | 25% | 1,105 | 26% |
| Business Development Costs | (25) | -1% | (37) | -1% | (52) | -1% | (65) | -2% | (64) | -2% |
| **Subtotal (Natural Gas Pipelines)** | **2,051** | **63%** | **2,159** | **62%** | **2,967** | **61%** | **2,915** | **72%** | **3,093** | **73%** |
| **Oil Pipelines** | | | | | | | | | | |
| Keystone Pipeline | 526 | 16% | 407 | 12% | 587 | 12% | 0 | 0% | 0 | 0% |
| **Subtotal (Oil Pipelines)** | **526** | **16%** | **407** | **12%** | **587** | **12%** | **0** | **0%** | **0** | **0%** |
| **Energy** | | | | | | | | | | |
| Western Power | 251 | 8% | 341 | 10% | 489 | 10% | 220 | 5% | 279 | 7% |
| Eastern Power | 251 | 8% | 215 | 6% | 314 | 6% | 231 | 6% | 220 | 5% |
| Bruce Power | 22 | 1% | 111 | 3% | 252 | 5% | 298 | 7% | 352 | 8% |
| General, admin and support costs | (34) | -1% | (28) | -1% | (43) | -1% | (38) | -1% | (39) | -1% |
| **Cdn Power EBITDA bef. Extras** | 490 | 15% | 639 | 18% | 1,012 | 21% | 711 | 18% | 812 | 19% |
| Northeast Power | 195 | 6% | 265 | 8% | 306 | 6% | 348 | 9% | 232 | 5% |
| General, admin and support costs | (34) | -1% | (28) | -1% | (38) | -1% | (33) | -1% | (39) | -1% |
| **U.S. Power EBITDA bef. Extras** | 161 | 5% | 236 | 7% | 268 | 5% | 314 | 8% | 192 | 5% |
| Alberta Storage | 54 | 2% | 62 | 2% | 89 | 2% | 140 | 3% | 173 | 4% |
| General, admin and support costs | (7) | 0% | (6) | 0% | (6) | 0% | (8) | 0% | (9) | 0% |
| **Gas Storage EBITDA bef. Extras** | 47 | 1% | 56 | 2% | 83 | 2% | 132 | 3% | 164 | 4% |
| Business Development Costs | (17) | -1% | (17) | 0% | (25) | -1% | (32) | -1% | (37) | -1% |
| **Subtotal (Energy)** | **681** | **21%** | **914** | **26%** | **1,338** | **27%** | **1,125** | **28%** | **1,131** | **27%** |
| Subtotal of segments | **3,259** | 100% | **3,480** | 100% | **4,893** | 100% | **4,040** | 100% | **4,225** | 100% |
| Corporate and Other | (30) | | (77) | | (87) | | (99) | | (118) | |
| **EBITDA before Extras.** | **3,229** | | **3,403** | | **4,806** | | **3,941** | | **4,107** | |
| Extraordinary items | (19) | | (44) | | (38) | | (134) | | 49 | |
| EBITDA | 3,210 | | 3,359 | | 4,768 | | 3,807 | | 4,156 | |

(b) Natural Gas Pipelines – United States

*American Natural Resources (ANR)*

- ANR consists of 17,000 km (10,563 miles) of pipeline transporting natural gas primarily from Texas and Oklahoma on its southwest leg and in the Gulf of Mexico on its southeast leg to Wisconsin, Michigan, Illinois, Ohio and Indiana. ANR also connects with other pipelines, providing access to other gas sources.
- ANR also owns and operates underground gas storage facilities in Michigan, with 250 bcf of capacity.
- Regulated by the Federal Energy Regulatory Commission (FERC) on a complaint basis with an estimated 15% ROE. Last pipeline rate settlement began in 1997 and is not likely to be reopened in the medium term.
- Services are provided under tariffs that set limits on the rates for services and allow for non-discriminatory negotiations and discounts. The value of ANR’s storage services is based on market conditions that could result in reduced rates and terms.
- ANR’s EBITDA fell by 16% in 9M 2012 compared with 9M 2011, primarily due to lower revenues, higher operating and maintenance costs, lower incidental commodity sales and a Q2 2011 counterparty settlement.

*Gas Transmission Northwest (GTN) System*

- The GTN system transports natural gas from the WCSB and Rocky Mountains along 2,178 km (1,353 miles) of pipeline to markets in Washington, Oregon and California.
- Regulated by the FERC, GTN negotiated a four-year rate settlement, effective January 1, 2012, with its customers. The settlement requires GTN to file for new rates to be effective January 1, 2016.

- The rate design provides full cost recovery, including ROE and income taxes over the capacity reservation component of rates regardless of usage.
- In May 2011, TCPL sold a 25% interest in GTN LLC to TC Pipelines LP, which accounts for the 18% decline in GTN EBITDA that is applicable to TCC.

*Great Lakes Gas Transmission (Great Lakes)*

- The Great Lakes system is a 3,404 km (2,115 miles) of natural gas pipeline system that connects with the Canadian Mainline at Emerson, Manitoba, and serves markets in central Canada and the U.S. Midwest.
- Regulated by the FERC on a complaint basis. Rate case settlement approved by the FERC on July 15, 2010, with modification, with no material impact expected on the entity's operating results, despite certain reduction in recourse rates. Highlights of the negotiated settlement include return on common equity of 13.25% and an equity component of 47%.
- Great Lakes' EBITDA fell by 18% in 9M 2012 compared with 9M 2011, primarily due to lower revenues from lower volumes as a result of declining volumes on the Canadian Mainline.

## (2) Oil Pipelines

*Base Keystone*

- Phase 1 of Base Keystone, which extends from Hardisty, Alberta, to Wood River and Patoka, Illinois, had an initial nominal capacity of 435,000 b/d and was placed into commercial service on June 30, 2010.
- Phase 2 of Base Keystone, which expanded nominal capacity to 591,000 b/d and extended the pipeline to Cushing, Oklahoma, was placed in commercial service in Q1 2011.
- Keystone XL (see *Major Capital Projects*), is expected to be placed in service in late 2014 or early 2015 if U.S. regulatory approvals are obtained.
- Gulf Coast Pipeline (see *Major Capital Projects*), is expected to be operational in late 2013.
- The combined Keystone system would have an initial capacity of 1.4 million b/d.

## (3) Energy

TCPL's 19 operating power plants have total capacity of approximately 10,800 MW, largely supported by low-cost, base-load generation with long-term contracts with stable, predictable earnings and cash flow. In addition, the segment includes 130 bcf of unregulated natural gas storage capacity in Alberta.

(a) <u>Canadian Power</u>

*Bruce Power (Ontario)*

- TCC owns 48.9% of Bruce A, which has four reactors with a combined capacity of 3,000 MW (see *Major Projects* for recent developments). The OPA receives all of Bruce A's output, under a contract, at a fixed price that is adjusted annually for inflation.
- TCC owns 31.6% of Bruce B, which has four operating reactors with a combined capacity of 3,200 MW. All output is sold under contracts to the OPA at a floor price, adjusted annually for inflation.
- The large decline in EBITDA in 9M 2012 compared with 9M 2011 was largely related to results at Bruce A, which were negatively affected by lower volumes as a result of the Unit 4 planned outage that commenced on August 2, 2012 and the impact of the Unit 3 West Shift Plus planned outage that commenced in November 2011 and was completed in June 2012.
- Bruce Power's Unit 1 and Unit 2 were both placed into commercial service during Q4 2012 following a significant refurbishment program.

*Sheerness (Alberta)*

- TCC has the right, under a PPA that expires in 2020, to purchase the coal-fired power generated by the 756 MW capacity Sheerness facility.

*Halton Hills (Ontario)*

- The OPA has an agreement to purchase the energy generated at Halton Hills under a 20-year contract.

| Canadian Power | | | U.S. Power | | |
|---|---|---|---|---|---|
| Western Power | (MW) | Fuel Type | | (MW) | Fuel Type |
| Sheerness | 756 | Coal | Ravenswood | 2,480 | Natural gas/oil |
| Sundance A | 560 | Coal | TC Hydro | 583 | Hydro |
| Sundance B (1) | 353 | Coal | Ocean State Power | 560 | Natural gas |
| MacKay River | 165 | Natural gas | Coolidge | 575 | Natural gas |
| Carseland | 80 | Natural gas | Kibby Wind | 132 | Wind |
| Bear Creek | 80 | Natural gas | **Total U.S. Power** | **4,330** | |
| Redwater | 40 | Natural gas | | | |
| Cancarb | 27 | Natural gas | | | |
| | 2,061 | | | | |
| Eastern Power | | | | | |
| Halton Hills | 683 | Natural gas | | | |
| Bécancour | 550 | Natural gas | | | |
| Cartier Wind (2) | 365 | Wind | | | |
| Portlands Energy (3) | 275 | Natural gas | | | |
| Grandview | 90 | Natural gas | | | |
| Bruce (4) | 2,480 | Nuclear | | | |
| | 4,443 | | | | |
| **Total Canada Power** | **6,504** | | **Total Canada and U.S.** | **10,834** | |

(1) TCPL's 50% share of the plant output.
(2) TCPL's 62% share of the total 590 MW project
(3) TCPL's 50% share of the total 550 MW
(4) TCPL's 48.9% proportionate interest in Bruce A and 31.6% proportionate interest in Bruce B

*Sundance A&B (Alberta)*

- TCPL has the right to 100% of the capacity of Sundance A under a PPA that expires in 2017.
- TCPL also has the right to 50% of capacity of Sundance B under a PPA that expires in 2020.
- In July 2012, an arbitration panel determined that TransAlta Corp (TransAlta, the owner and operator of Sundance A) could not terminate the Sundance A PPA and ordered TransAlta to rebuild Units 1 and 2.
- The panel also limited TransAlta's *force majeure* claim from November 20, 2011, until the units can be returned to service in the fall of 2013. As a result, TCC will not record revenues or associated capacity payments until that time, which contributed to a decline in Western Power EBITDA during 9M 2012.

*Bécancour (Quebec)*

- Bécancour's entire power output is supplied to Hydro-Quebec under a 20-year power purchase contract, which expires in 2026.
- However, Hydro-Quebec has currently suspended all electricity generation at Bécancour (but continues to make payments as per normal operations) due to low regional electricity demand.

(b) U.S. Power

*Ravenswood (New York City)*

- Ravenswood, located in New York City, is a natural gas and oil-fired generating facility, consisting of multiple units employing steam turbine, combined-cycle and combustion turbine technology.
- This facility has the capacity to supply 21% of the overall peak load in New York City.
- Power output and capacity is sold to the New York ISO market.
- FERC has addressed two complaints with respect to the controversial interpretation of the mitigation exemption test by the New York Independent System Operator on new entrants into the market, which effectively lowered capacity payments that Ravenswood received for making its capacity available.
- Based on the changes ordered by the FERC, TCC anticipates that capacity auction prices could be higher in the future, resulting in potentially higher revenues for Ravenswood.

*TC Hydro (New Hampshire, Vermont and Massachusetts)*
- TC Hydro is comprised of 13 hydroelectric facilities, including stations and associated dams and reservoirs.

*Coolidge Generating Station (Arizona)*
- During May 2011, the Coolidge Generating Station began operations at its simple cycle, natural gas-fired power facility in Arizona.
- Power produced by Coolidge is sold to the Salt River Project under a 20-year PPA.

*Ocean State Power (OSP) (Rhode Island)*
- OSP is a natural gas-fired, combined-cycle facility.

(c) Natural Gas Storage
*Edson (Alberta)*
- Edson is an underground natural gas storage facility connected to the Alberta System with working storage capacity of approximately 50 bcf and withdrawal rates of 725 mmcf/d of gas.

*CrossAlta (Alberta)*
- CrossAlta (60% owned and operated by TCC) is an underground natural gas storage facility connected to the Alberta System with working storage capacity of approximately 68 bcf and withdrawal rates of 550 mmcf/d of gas.
- TCC has reached an agreement to acquire the remaining 40% interest in CrossAlta for $210 million. Subject to certain conditions, the transaction is expected to close by Q1 2013.

**TransCanada Corporation and Subsidiaries**

**Report Date:**
November 27, 2012

## TransCanada Corporation (Consolidated)

| Balance Sheet (CAD millions) | US GAAP | US GAAP | CdnGAAP | | US GAAP | US GAAP | CdnGAAP |
|---|---|---|---|---|---|---|---|
| | Sept. 30 | Dec. 31 | Dec. 31 | | Sept. 30 | Dec. 31 | Dec. 31 |
| **Assets** | 2012 | 2011 | 2011 | **Liabilities and Equity** | 2012 | 2011 | 2011 |
| Cash and equivalents | 494 | 654 | 765 | Notes payable | 1,470 | 1,863 | 1,880 |
| Accounts receivable and other | 1,846 | 2,208 | 2,459 | A/P and accrued liab. | 2,223 | 2,724 | 3,032 |
| Inventories | 214 | 248 | 416 | L.t. debt due in one year | 1,070 | 935 | 968 |
| Current assets | 2,554 | 3,110 | 3,640 | Current liabilities | 4,763 | 5,522 | 5,880 |
| Property, plant and equip., net | 32,379 | 32,467 | 38,262 | Other long-term liabs. | 4,885 | 4,817 | 4,896 |
| Equity investments | 5,520 | 5,077 | 0 | Long-term debt | 17,899 | 17,724 | 18,421 |
| Goodwill | 3,419 | 3,534 | 3,650 | Jnr. subordinated notes | 983 | 1,016 | 1,009 |
| Regulatory assets | 1,629 | 1,684 | 1,405 | Noncontrolling interests | 1,030 | 1,076 | 1,076 |
| Intangibles and other assets | 1,440 | 1,466 | 2,038 | Preferred shares | 1,613 | 1,613 | 1,613 |
| Total | 46,941 | 47,338 | 48,995 | Common equity | 15,768 | 15,570 | 16,100 |
| | | | | Total | 46,941 | 47,338 | 48,995 |

| (CAD millions where applicable) | US GAAP | US GAAP | US GAAP | US GAAP | Cdn GAAP | Cdn GAAP | Cdn GAAP |
|---|---|---|---|---|---|---|---|
| **Balance Sheet and** | 9 mos. ended Sept. 30 | | 12 mos. ended | For the year ended December 31 | | | |
| **Liquidity Ratios** | 2012 | 2011 | Sept. 30, 2012 | 2011 | 2011 | 2010 | 2009 |
| Current ratio | 0.54 | n.a. | 0.54 | 0.56 | 0.62 | 0.59 | 0.64 |
| Net debt in capital structure | 51.1% | 51.6% | 51.1% | 51.0% | 51.8% | 52.6% | 51.9% |
| Total debt in capital structure | 51.7% | 52.2% | 51.7% | 51.8% | 52.7% | 53.5% | 53.1% |
| Common equity in capital structure | 40.5% | 39.9% | 40.5% | 40.3% | 39.6% | 39.3% | 40.9% |
| Cash flow/total debt | 15.7% | 16.4% | 15.8% | 16.4% | 16.8% | 15.6% | 15.5% |
| (Cash flow - dividends)/net capex | 0.96 | 1.06 | 0.89 | 0.96 | 0.74 | 0.43 | 0.38 |
| Common divs/net income (before extras) | 88.3% | 71.6% | 87.6% | 74.6% | 72.8% | 78.9% | 76.3% |
| Total divs/net income (before extras) | 92.2% | 74.9% | 91.6% | 78.1% | 76.2% | 82.1% | 76.7% |
| **Coverage Ratios** (times) | | | | | | | |
| EBIT interest coverage | 2.30 | 2.63 | 2.39 | 2.63 | 2.55 | 2.01 | 2.01 |
| EBITDA interest coverage | 3.38 | 3.70 | 3.47 | 3.71 | 3.73 | 3.06 | 3.02 |
| Fixed-charges coverage | 2.18 | 2.48 | 2.25 | 2.48 | 2.41 | 1.92 | 2.00 |
| Cash flow interest coverage | 3.58 | 3.84 | 3.60 | 3.80 | 3.84 | 3.59 | 3.27 |
| **Profitability Ratios** (before extras.) | | | | | | | |
| Operating margin | 32.9% | 36.2% | 33.2% | 35.8% | 35.9% | 32.1% | 33.5% |
| Profit margin | 17.8% | 21.2% | 18.0% | 20.5% | 17.7% | 17.4% | 16.3% |
| Return on common equity | 8.6% | 10.3% | 8.5% | 9.9% | 9.9% | 8.9% | 9.4% |
| Return on capital | 5.2% | 5.8% | 5.2% | 5.7% | 5.8% | 4.9% | 5.7% |
| **Segmented EBIT** (CAD millions) | | | | | | | |
| Natural Gas Pipelines | 1,354 | 1,472 | n.a. | n.a. | 1,981 | 1,938 | 2,063 |
| Oil Pipelines | 417 | 313 | 561 | 457 | 457 | 0 | 0 |
| Energy | 466 | 719 | n.a. | n.a. | 940 | 748 | 784 |
| Corporate | (40) | (88) | n.a. | n.a. | (100) | (99) | (117) |
| EBIT before extras. | 2,197 | 2,416 | 3,027 | 3,246 | 3,278 | 2,587 | 2,730 |
| Net income before extras | 1,053 | 1,235 | 1,399 | 1,581 | 1,620 | 1,406 | 1,331 |
| Reported earnings | 1,034 | 1,191 | 1,424 | 1,581 | 1,582 | 1,272 | 1,380 |
| **Selected Financial Data** (CAD millions) | | | | | | | |
| Cash flow (bef. working capital changes) | 2,466 | 2,614 | 3,301 | 3,449 | 3,663 | 3,331 | 3,080 |
| Capex, equity investments, other | (2,112) | (2,044) | (3,195) | (3,127) | (3,274) | (5,036) | (5,417) |
| Common and preferred dividends paid | (994) | (948) | (1,328) | (1,282) | (1,282) | (1,161) | (1,010) |
| Free cash flow (before work. cap. changes) | (640) | (378) | (1,222) | (960) | (893) | (2,866) | (3,347) |
| Changes in working capital items | 80 | 145 | 245 | 310 | 310 | (249) | (90) |
| Gross free cash flow | (560) | (233) | (977) | (650) | (583) | (3,115) | (3,437) |
| Other investing activities | 63 | 145 | (78) | 4 | (8) | (392) | (1,606) |
| Net free cash flow | (497) | (88) | (1,055) | (646) | (591) | (3,507) | (5,043) |
| **Selected Operating Statistics** | | | | | | | |
| Cdn. Mainline Avg. Invest. Base | 5,748 | 6,250 | | | 6,179 | 6,466 | 6,531 |
| Alb. System Avg. Invest. Base | 5,426 | 5,017 | | | 5,074 | 4,989 | 4,756 |
| Canadian Mainline Volumes (Bcf/day) | 4.251 | 5.384 | | | 5.170 | 4.564 | 5.562 |
| Alberta System Volumes (Bcf/day) | 9.825 | 9.425 | | | 9.636 | 9.444 | 9.693 |
| ANR System Volumes (Bcf/day) | 4.368 | 4.661 | | | 4.674 | 4.353 | 4.315 |
| Foothills System Volumes (Bcf/day) | n.a. | n.a. | | | 3.532 | 3.962 | 3.301 |
| Base Keystone Deliveries (000s of b/d) | 508 | 382 | | | 411 | n.a. | n.a. |
| Energy Sales Volumes (GWh) | 31,319 | 31,510 | | | 41,573 | 44,810 | 38,980 |

n.a. = not available

**TransCanada Corporation and Subsidiaries**

**Report Date:**
November 27, 2012

## Ratings

| Debt Rated | Issuing Entity | Rating | Rating Action | Trend |
|---|---|---|---|---|
| Issuer Rating | TransCanada PipeLines Limited | A | Confirmed | Stable |
| Unsecured Debentures & Notes | TransCanada PipeLines Limited | A | Confirmed | Stable |
| Junior Subordinated Notes | TransCanada PipeLines Limited | BBB (high) | Confirmed | Stable |
| Preferred Shares – Cumulative | TransCanada PipeLines Limited | Pfd-2 (low) | Confirmed | Stable |
| Commercial Paper | TransCanada PipeLines Limited | R-1 (low) | Confirmed | Stable |
| Preferred Shares – Cumulative | TransCanada Corporation | Pfd-2 (low) | Confirmed | Stable |
| Commercial Paper* | TransCanada Keystone Pipeline, LP | R-1 (low) | Confirmed | Stable |

* Guaranteed by TransCanada PipeLines Limited and TransCanada PipeLine USA Ltd.

## Rating History

| TransCanada PipeLines Limited | Current | 2011 | 2009-2010 | 2008 | 2007 | 2006 |
|---|---|---|---|---|---|---|
| Issuer Rating | A | NR | NR | NR | NR | NR |
| Unsecured Debentures & Notes | A | A | A | A | A | A |
| Junior Subordinated Notes | BBB (high) | BBB (high) | BBB (high) | BBB (high) | BBB (high) | NR |
| Preferred Shares - Cumulative | Pfd-2 (low) | Pfd-2 (low) | Pfd-2 (low) | Pfd-2 (low) | Pfd-2 (low) | Pfd-2 (low) |
| Commercial Paper | R-1 (low) | R-1 (low) | R-1 (low) | R-1 (low) | R-1 (low) | R-1 (low) |
| **TransCanada Corporation** | | | | | | |
| Preferred Shares – Cumulative | Pfd-2 (low) | Pfd-2 (low) | Pfd-2 (low) | NR | NR | NR |
| **TransCanada Keystone Pipeline, LP** | | | | | | |
| Commercial Paper* | R-1 (low) | R-1 (low) | R-1 (low) | R-1 (low) | NR | NR |

* Guaranteed by TransCanada PipeLines Limited and TransCanada PipeLine USA Ltd.

## Related Research

- NOVA Gas Transmission Ltd. rating report, August 8, 2012
- Trans Quebec & Maritimes Pipeline Inc., rating report, May 1, 2012

Note:
All figures are in Canadian dollars unless otherwise noted.

# APPENDIX F

# Credit Opinion: TransCanada PipeLines Limited

Global Credit Research - 11 May 2012

*Calgary, Alberta, Canada*

## Ratings

| Category | Moody's Rating |
|---|---|
| Outlook | Stable |
| Issuer Rating | A3 |
| Senior Unsecured | A3 |
| Jr Subordinate | Baa1 |
| Pref. Stock -Dom Curr | Baa2 |
| **Parent: TransCanada Corporation** | |
| Outlook | Stable |
| Issuer Rating | Baa1 |
| **NOVA Gas Transmission Ltd.** | |
| Outlook | Stable |
| Senior Unsecured | A3 |
| **ANR Pipeline Company** | |
| Outlook | Stable |
| Senior Unsecured | A3 |
| **Gas Transmission Northwest LLC** | |
| Outlook | Stable |
| Senior Unsecured | A3 |
| **TC Pipelines, L.P.** | |
| Outlook | Stable |
| Senior Unsecured | Baa2 |
| Subordinate Shelf | (P)Baa3 |

## Contacts


| Analyst | Phone |
|---|---|
| David Brandt/Toronto | 416.214.3864 |
| William L. Hess/New York City | 212.553.3837 |


## Key Indicators

[1]**TransCanada PipeLines Limited**

| | [2]**LTM** | **2011** | **2010** | **2009** | **2008** | **2007** |
|---|---|---|---|---|---|---|
| FFO + Interest / Interest | **3.3x** | **3.3x** | **3.0x** | **3.0x** | **3.4x** | **3.3x** |
| FFO / Debt | **15.3%** | **14.5%** | **12.6%** | **13.6%** | **14.0%** | **16.2%** |
| Debt / Capitalization | **49.8%** | **50.6%** | **53.7%** | **54.0%** | **58.5%** | **57.3%** |
| Operating Margin | **35.2%** | **35.5%** | **32.2%** | **34.1%** | **33.5%** | **30.3%** |

[1] All ratios are calculated in accordance with Moody's Natural Gas Pipelines Methodology. In addition, Moody's adjusts for one-time items. [2] Last twelve months, based on financial data as of 03/31/2012.

*Note: For definitions of Moody's most common ratio terms please see the accompanying* User's Guide.

## Opinion

### Rating Drivers

Influential scale of business with geographic and market diversification

Relatively low-risk pipeline and electricity generation company with stable cash flows

Supportive regulatory and business environments in Canada

Financial metrics weakened by the magnitude of capital investment

Strong liquidity despite the propensity to aggressively manage liquidity

Event risk attributable to the confluence of multiple events across business segments/projects

### Corporate Profile

TransCanada PipeLines Limited (TCPL) is a diversified energy company 100% owned by TransCanada Corporation (TCC), a publicly traded company holding only the TCPL asset.

TCPL is organized into three business segments: Natural Gas Pipelines, Oil Pipelines and Energy - with attributed EBITDA (12 mths ending 31/12/11) approximately 61%, 11% and 28%, respectively.

The Natural Gas Pipelines segment comprises one of North America's largest networks of integrated gas pipelines and regulated gas storage.

The Oil Pipelines segment consists of the Keystone pipeline that went into service in 2010 and was expanded in the first quarter of 2011, carrying crude produced in Alberta's oil sands to markets in Illinois and Oklahoma. TCPL's pipelines are virtually all regulated - in Canada by the National Energy Board (NEB); in the United States by the Federal Energy Regulatory Commission (FERC).

The Energy segment comprises a diversified portfolio of unregulated electricity generation and gas storage assets in Canada and the United States. TCPL's generation assets tend to be either low cost (e.g. Bruce nuclear, TC Hydro, and the Alberta PPAs (Shearness and Sundance A and B coal plants)) or supported by long-term contracts with highly rated counterparties (e.g. Bruce Power, Portlands Energy Centre, Cartier Wind, Becancour, Grandview, Coolidge and Halton Hills).

At 31/12/11, approximately $15 billion of TCPL's $18.6 billion of consolidated long term debt resided at TCPL. The balance resided at subsidiaries: including NOVA Gas Transmission Ltd. (NOVA), Gas Transmission Northwest Corporation (GTN) and ANR Pipeline Company (ANR); and investees: including TC Pipelines, LP, Great Lakes Gas Transmission, Iroquois Gas Transmission System, L.P. and Portland Natural Gas Transmission System.

### SUMMARY RATING RATIONALE

TCPL's A3 senior unsecured rating reflects its low business risk profile offset by its relatively weaker financial profile. TCPL's low business risk is attributable to the stable and predictable cash flows generated by its extensive and diversified portfolio of regulated natural gas pipelines, contracted oil pipelines and relatively low-risk electricity generation assets; its strategic importance as the entity transporting the majority of gas produced in the Western Canada Sedimentary Basin (WCSB); and the supportive regulatory and business environments in which its Canadian assets operate. TCPL's financial profile has weakened over the last few years due to the substantial capital investment that it is making across all three business segments. The $13 billion program (oil pipelines $7.8 billion; natural gas pipelines $2.2 billion; energy $3 billion) has approximately $7 billion still to be spent over the next three years. It is expected to begin contributing to higher EBITDA towards the end of 2012 when the Bruce Power 1 & 2 reactors are scheduled to be back in service, and gain momentum in 2013 and 2014 as the other elements, most notably the pipeline projects, are brought into service. It is noteworthy that the protracted approval process for the Keystone XL pipeline, the largest investment at approximately $7.5 billion, has had the unintended benefit of improving financials and increasing the internally generated funding component for the investment.

TCC's Baa1 issuer rating is one notch lower than TCPL's A3 senior unsecured rating reflecting the structural subordination of TCC's obligations to the debt of TCPL and its subsidiaries.

**DETAILED RATING CONSIDERATIONS**

The primary rating methodology applied to TCPL is our Natural Gas Pipelines Methodology, since TCPL's pipeline investments account for approximately 70% of its consolidated assets and EBITDA. However, we also consider our Unregulated Utilities and Power Companies Methodology, recognizing that unregulated power represents a significant portion of TCPL's operations.

TCPL maps to an A3 under our Natural Gas Pipelines Methodology although this does not fully capture the higher business risk profile of TCPL's unregulated power investments (~28% of EBITDA (12 mths ended 31/12/11)). Under the Unregulated Utilities and Power Companies Methodology TCPL maps in the low Baa range reflecting a set of financial metrics that would be considered weak for a company solely engaged in unregulated power generation. An EBITDA-weighted average of the two grid-indicated ratings yields a rating indication of approximately Baa1 which falls within the one to two notch band around the assigned rating that our rating methodologies aim to achieve. We continue to place considerable emphasis on the strategic importance of TCPL's Canadian pipeline assets in moving the majority of WCSB gas production to market and the relatively supportive regulatory and business climates in Canada.

Over the past several months, TCPL's Keystone XL pipeline project has dominated the company's storyline and, to a degree, restricted TCPL's ability to respond to market developments impacting its oil pipeline business. The significance and magnitude of the Keystone XL project and the political sensitivity it has taken on in an election year, coupled with the investment to date, all but locked in TCPL to staying the course despite considerable uncertainty as to timing and whether or not XL will ultimately be approved. The outcome for TransCanada has been to see Enbridge and Kinder Morgan react and propose alternative pipeline projects - Enbridge's Seaway acquisition, reversal and expansion; Enbridge's Spearhead expansion; Kinder Morgan's Trans Mountain expansion, Enbridge's Line 9 reversal - and seize the initiative and the timeline to provide takeaway capacity and market reach for oil sands production.

With all the focus on XL, it is easy to lose perspective and overlook TCPL's business platform and strengths. In the first half of 2012, TCPL has responded: first with plans to proceed with the southern leg of XL from Cushing to the Gulf ("Keystone Gulf Coast Project") and with a re-filing of its application for the environmentally-sensitive, cross-border section routed through Nebraska. Our assessment is that TransCanada has now mitigated some of its downside exposure if Keystone XL is not approved, by developing a stand-alone pipeline that will relieve the bottleneck at Cushing. Initially, we expect that TransCanada will be exposed to some merchant risk with the Gulf Coast pipeline until the fate of Keystone XL is certain and longer term commitments signed - either with shippers moving oil from Cushing to Gulf refiners or as part of the Keystone/Keystone XL system. Either way, we consider the risk to be manageable for TransCanada.

In addition, TransCanada has used the release of first quarter results, and its annual general meeting, to reintroduce perspective by emphasizing its overall development plans that include, but are not defined by Keystone XL. Specifically, TransCanada noted that it expects to complete $13 billion of projects currently in development - $7.8 billion/oil pipelines; $2.2 billion/natural gas pipelines; $3 billion/energy - over the next 3 years, that include:

Oil pipelines

- Keystone Gulf Coast

- Keystone XL

- Keystone Bakken Marketlink

- Keystone Hardisty Terminal Project

Natural gas pipelines

- Alberta System expansion and additions

- Tamazunchale pipeline extension in Mexico

Energy

- Bruce Power reactors 1 & 2 restarts

- Cartier wind power in Quebec

- Acquisition of Ontario solar projects

Of the $13 billion, about $7 billion remains to be invested. We expect that it will be comfortably financed from internally generated cash flow and debt capacity.

TCPL benefits from a large and growing asset base with consolidated assets of approximately $49 billion at December 31, 2011. We consider the Canadian pipeline assets to have the lowest business risk of all of the assets in TCPL's portfolio. Due to higher levels of competition and lack of throughput protection afforded to most U.S. pipelines, we consider the U.S. pipelines to have somewhat higher business risk than the Canadian pipelines but clearly lower business risk than the unregulated power assets.

TCPL's Canadian pipeline assets, including the Alberta System and Canadian Mainline, are strategically important to both Canada and the U.S. in that they transport a significant portion of WCSB gas production to markets throughout North America. TCPL's extensive network of pipelines and large number of interconnections with other pipelines allows it to offer shippers access to a variety of downstream markets.

Despite lower throughput on the Mainline in recent years, which has placed upward pressure on tolls and adversely impacted the Mainline's competitiveness, we continue to believe that TCPL's Canadian-based assets benefit from the supportiveness of Canada's business and regulatory environments relative to other jurisdictions. For a number of reasons, we believe that the Mainline's challenges will be resolved without any material adverse impact on TCPL's financial condition. We note that today the Mainline represents a smaller proportion of TCPL's large and diversified asset portfolio than it did even five years ago. Also, the Mainline is an essential component of the North American gas transportation network for which there are no economic alternatives in the form of existing or potential new pipelines. Furthermore, the Mainline was developed over several decades on the premise of cost-of-service regulation incorporating throughput protection. We do not expect that fundamental changes to these regulatory principles would be undertaken lightly.

Although TCPL has a diverse portfolio of regulated pipelines, the majority of the gas transported is produced from the WCSB. In recent years, a number of factors have contributed to reduced gas production in the WCSB and declining throughput on the Alberta System and the Mainline. Declining throughput reflects a number of factors including lower drilling activity due to changes to Alberta's royalty regime; natural production declines in existing wells; increased intra-Alberta consumption driven by oil sands development; recession-reduced gas demand and gas prices as well as the rapid growth of shale gas production in the U.S.

TCPL is also attempting to mitigate the impact of declining WCSB volumes by connecting to new sources of supply with projects such as Groundbirch, Horn River and Bison and continuing to develop projects such as Alaska and Mackenzie which would connect potentially large new sources of gas to TCPL's pipelines.

TCPL's unregulated operations have become a larger proportion of its total assets in recent years due to activities like refurbishing Units 1 and 2 at the Bruce nuclear facility, acquiring the 2,480 MW Ravenswood gas/oil fired generating complex in New York City and constructing fully contracted power facilities such Halton Hills, Cartier Wind and Coolidge.

We consider TCPL's electricity generation assets to be relatively low risk because they tend to have low marginal costs of production, be supported by long-term contracts with highly rated counterparties or be located in attractive markets. TCPL typically depreciates its power generation assets over the life of the associated power purchase agreements. Given a target capital structure, this has the effect of ensuring that the assets are fully depreciated and that TCPL is carrying little or no debt against these assets at expiry of the PPAs. While TCPL's investment in the Bruce nuclear facilities provides it with a source of low-cost generation, there are material risks related to the restart and refurbishment of the Bruce A Units 1 & 2.

While most of the technically challenging nuclear-related aspects of the refurbishment have now been completed and they are proceeding towards synchronizing the power generation from Unit 2, there continue to be some, what we expect are manageable, issues causing delay in commissioning. It is expected that Unit 2 will be in service this quarter, but it appears likely that Unit 1 could face similar delays and not be brought into service until the third quarter. If that is the case, the PPA`s floor price for power produced across all four reactors would fall away on July

1, 2012 and Bruce Power would be exposed to spot market rates until all four units can be brought into service. The impact is expected to be minimal as the delays in getting Units 1 & 2 in service will be short-lived.

In addition, cash flows from the Ravenswood plant have been significantly below forecast due to the construction of new generation in NYISO and NYISO's application of pricing rules for new capacity. While TCPL and others have petitioned FERC regarding NYISO's application of the new capacity pricing rules, the outcome of the petition and its impact on Ravenswood's future cash flows is not yet known. On a positive note, approximately 800MW of capacity has been taken out of service and Ravenswood is seeing significantly better rates from the 2012 summer strip auction than it experienced last summer.

The dispute over TransAlta's decision to shut down Sundance units 1 & 2 and declare force majeure under the PPA owned by TransCanada, and the subsequently issued notice for destruction, should be resolved with the arbitration decision expected by mid-year. TransCanada's position is that economic destruction is not warranted and continues to book revenue and costs under the PPA. An adjustment to earnings would be required for TransCanada if TransAlta's case prevails. Offsetting would be a payment to TransCanada of the PPA's book value. A decision in favour of TransCanada's position would likely require that TransAlta compensate TransCanada until the Sundance units are back in service. The Sundance PPA runs until 2017.

We continue to believe that the business risk profile of the unregulated Energy segment is fundamentally higher than that of the regulated Pipelines segment and we anticipate that TCPL's Energy segment cash flows will be less stable and predictable than those of the Pipeline segments.

RELATIVELY WEAK FINANCIAL PROFILE

TCPL's financial profile reflects regulatory policy in Canada where regulators typically utilize a more leveraged capital structure and less robust returns on equity for ratemaking purposes than is typical for regulated U.S. pipelines. We continue to believe that TCPL's weak financial profile is balanced by the low-risk nature of its assets, the strategic value of its Canadian regulated pipelines and the supportive regulatory and business environments in Canada. However, to remain at the A3 rating level, we expect TCPL to demonstrate sustained improvement in its financial metrics, for instance, FFO Interest Coverage in the mid 3x range and FFO/Debt of about 15%.

CONSISTENT MANAGEMENT STRATEGY & RELATIVELY CONSERVATIVE APPROACH TO FUNDING ORGANIC GROWTH AND ACQUISITIONS

Our rating reflects TCPL's consistent focus on regulated pipeline and gas storage assets, relatively low-risk power generation assets and unregulated gas storage assets that complement its pipeline investments as well as management's demonstrated track record of issuing substantial amounts of up-front common equity in support of organic growth and acquisitions.

In the five years ended 2010, TCPL's asset base virtually doubled in size through a combination of acquisitions and organic growth. This growth was generally consistent with TCPL's core strategy (regulated pipelines and low-risk power generation) and the acquisitions tended to be of manageable size. However, this growth increased TCPL's exposure to unregulated businesses; fundamentally riskier assets such as Bruce nuclear, Ravenswood uncontracted generation, and unregulated gas storage; and operations outside of Canada. While TCPL manages the higher business and operating risks associated with its unregulated activities by underpinning these assets with contracts where possible, the increased size of the Energy segment and increased exposure to assets outside of Canada contributed to TCPL's one-notch downgrade in June 2008. We believe that further increases in the relative size or risk of TCPL's unregulated activities would result in downward rating pressure unless offset by a stronger financial profile.

TCPL is both an operating company (the Mainline assets reside at TCPL) and a holding company (NOVA, ANR and GTN among others are held at subsidiaries that issue third party debt). TCPL's debt is structurally subordinate to the debt at NOVA, ANR, GTN and other subsidiaries and investees. However, there are no significant ring-fencing restrictions between TCPL and its wholly-owned subsidiaries and cash is managed on a centralized basis. This, combined with the high degree of operational integration of TCPL's various pipeline systems, causes us to consider the credit profiles of TCPL and its subsidiaries to be more closely aligned than would be the case if strong ring fencing provisions were to exist.

We continue to believe that there is potential for increased organizational complexity and structural subordination due to the joint ownership of assets including TCPL's investment in Bruce Power and TC PipeLines, LP and potential future investments such as Alaska and the Mackenzie.

**Liquidity Profile**

Although TCPL at times seems aggressive in its management of liquidity with modest committed bank facilities in relation to its capital investment program and ongoing funding requirements, it is based on management's assumption that TCPL will continue to have ready access to funding through capital market transactions. The company's continuing success in that regard, most notably through the 2008/09 global financial crisis, is cited by management and provides a degree of comfort.

As of the date of this writing, liquidity is strong given recent developments - principally the delay in Keystone XL, the issuance of $750 million term debt in November 2011 and the issuance of US$500 million of three-year senior notes in March. At the end of March, TCPL was reporting cash on hand of about $200 million, after retiring about $500 million of $880 million of 2012 debt maturities, and $4.3 billion in committed and undrawn credit facilities along with its commercial paper programs.

TCPL is expecting to generate approximately $3.5 billion of funds from operations during the fiscal year ending 31 December, 2012 to cover expected dividends of approximately $1.4 billion and capital expenditures of approximately $3.3 billion, leaving an expected funding requirement of approximately $1.6 billion with excess liquidity of approximately $2.9 billion.

**Rating Outlook**

The Stable outlook reflects our expectation that TCPL will remain predominantly a regulated energy infrastructure company. The outlook also reflects our expectation TCPL will achieve FFO Interest Coverage in the mid 3x range and FFO/Debt of 15% or more in 2012.

**What Could Change the Rating - Up**

TCPL's rating could be upgraded if the company were to achieve a sustainable improvement in its financial metrics, for instance, FFO Interest Coverage greater than 4x and FFO to Debt in the high teens. This assumes a satisfactory resolution to the 2012/13 Mainline toll application and that TCPL's Energy segment either remains stable or declines in terms of its contribution to the overall enterprise. Since we consider the Energy segment to be riskier than the Natural Gas or Oil Pipeline segments, the upgrade thresholds for TCPL's financial ratios would increase if the relative size of the Energy segment were to grow.

**What Could Change the Rating - Down**

While we do not consider it probable, it is possible that a confluence of events could, in the aggregate, produce a negative outcome with a significant impact on operations - further delays, additional capex with the Bruce Power units 1/2 start-up; a material deterioration in the prospects for Natural Gas Pipelines due, for example, to further changes in North American gas flow as a result of shale gas developments; delays and/or negative outcomes to rate applications re: TCPL's Canadian Mainline and its Ravenswood generating station in New York; significant rerouting costs and timing of remaining capex for Keystone XL; global economic/financial uncertainty disrupting normal access to capital markets - that would affect our outlook and adversely impact the rating if FFO Interest Coverage dropped below 3x and FFO to Debt below 13%. We note that various actions (deferral of capex; suspension of dividends) would be available to management to mitigate the potential impact.

Given the higher risk of the Energy segment, a material increase in the relative size of that segment could also lead to a downgrade unless balanced by a strengthening of TCPL's financial metrics.

**Rating Factors**

**TransCanada PipeLines Limited**

| **Natural Gas Pipelines** [1] | [2]**Current LTM** | | | [3]**Moody's 12-18 Month Forward View As of 05/08/2012** | |
|---|---|---|---|---|---|
| **Factor 1: Market Position (20.0%)** | **Measure** | **Score** | | **Measure** | **Score** |
| a) Market Position | | Aa | | | Aa |

| | | | | |
|---|---|---|---|---|
| **Factor 2: Quality of Supply Sources (20.0%)** | | | | |
| a) Quality of Supply Sources | | A | | A |
| **Factor 3: Contract Quality (20.0%)** | | | | |
| a) Contract Quality | | A | | A |
| **Factor 4: Financial Strength (40.0%)** | | | | |
| a) (FFO + Interest Expense) / Interest Expense (3 Year Avg) | 3.2x | Baa | 3.5x - 3.7x | Baa |
| b) FFO / Debt (3 Year Avg) | 14.0% | Ba | 15% - 17% | Baa |
| c) Debt / Book Capitalization (3 Year Avg) | 52.2% | Baa | 52% - 50% | Baa |
| d) Operating Margin (3 Year Avg) | 34.0% | Ba | 31% - 35% | Ba |
| **Rating:** | | | | |
| a) Indicated Rating from Grid | | A3 | | A3 |
| b) Actual Rating Assigned | | A3 | | A3 |

[1] All ratios are calculated in accordance with Moody's Natural Gas Pipelines Methodology. In addition, Moody's adjusts for one-time items. [2] Based on financial data as of 03/31/2012. [3] This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures

# APPENDIX G

Feller-Rate
CLASIFICADORA DE RIESGO
*Strategic Affiliate of* **Standard & Poor's**

En Santiago, Chile, a 29 de septiembre de 2011, Feller Rate Clasificadora de Riesgo Ltda., certifica que la clasificación asignada a la solvencia de Isolux Corsán Concesiones, S.A.U. es la siguiente:

| | | |
|---|---|---|
| Solvencia | : | BBB+ |

Esta clasificación se asignó sobre la base de la metodología aprobada por esta empresa clasificadora e incorpora en el análisis los estados financieros al 31 de diciembre de 2010.

Oscar Mejías
Gerente General

Feller-Rate
CLASIFICADORA DE RIESGO
Strategic Affiliate of Standard & Poor's

# ISOLUX CORSÁN CONCESIONES, S.A.U.

INFORME DE CLASIFICACION

Septiembre 2011

| | Sep. 2011 |
|---|---|
| Solvencia | BBB+ |

**ICC: concesiones**

*Millones de Euros*

| | Tipo | Año Adjudi-cación | Inicio Operacio-nes |
|---|---|---|---|
| Panipat – Jalandhar Tollway Private Limited (NH1) | Autopista | 2008 | Operativa |
| Varanasi Aurangabad (NH2) Tollway Private Limited | Autopista | 2010 | Operativa |
| Surat Hazira Tollway Private Limited (NH6) | Autopista | 2009 | 2012 |
| Kishangarh Beawar Tollway Private Limited (NH8) | Autopista | 2009 | 2012 |
| ENE Uttar Pradesh India (UP) | Línea Tx | 2011 | 2014 |
| Rodovía BR 116 (BR116) | Autopista | 2009 | Operativa |
| Concesionaria Autopista Perote-Xalapa S.A. de C.V. (COPEXA) | Autopista | 2008 | 2012 |
| Concesionaria Autopista Monterrey Saltillo S.A de C.V. (CAMS) | Autopista | 2006 | 2010 |
| Wind Energy Transmission Texas (WETT) | Línea Tx | 2009 | 2013 |
| Jauru transmissora de energia S.A. (JAURU) | Línea Tx | 2007 | Operativa |
| Cachoeira Paulista Transmissora de Energia S/A (CPTE) | Línea Tx | 2002 | Operativa |
| Linhas de Macapá Transmissora de Energia S/A (LMTE) | Línea Tx | 2008 | 2012 |
| Linhas de Xingu Transmissora de Energia S.A. (LXTE) | Línea Tx | 2008 | 2012 |
| Interligacao Electrica Norte e Nordeste S.A. (IENNE) | Línea Tx | 2008 | Operativa |

## Fundamentos

La clasificación "BBB+" otorgada a Isolux Corsán Concesiones, S.A.U. (ICC) responde a su amplia experiencia y destacada trayectoria en el desarrollo y gestión integral de concesiones y al sólido respaldo competitivo, operacional y financiero, que representa formar parte del grupo de sociedades dependientes del Grupo Isolux Corsán, S.A. En contrapartida, la clasificación considera que la actual cartera de concesiones es aún inmadura, con la mayoría de los proyectos aún en etapa de construcción o de reciente adjudicación. Asimismo, un factor relevante que restringe la clasificación es el elevado endeudamiento y ajustadas coberturas que exhibe su controlador.

ICC es la sociedad que agrupa actividades de concesiones de autopistas y de líneas de transmisión del Grupo Isolux Corsán. Actualmente, ICC agrupa a 14 concesiones en las actividades de transmisión de energía y autopistas, ubicadas en India, Brasil, México y EEUU. Éstas se extienden aproximadamente por más de 5.000 Km. de líneas de transmisión (donde destaca la reciente adjudicación de Uttar Pradesh en India, la que cuenta con 1.600 Km.) y 1.500 Km. de carreteras, donde destaca la Rodovía BR116, en Brasil, con 680 Km. La cartera cuenta con plazos promedio de operación que se ubican en torno a los 30 años.

La estrategia de participación de ICC en las diversas sociedades concesionarias consiste en asegurar el control de los activos, ya sea mediante una participación mayoritaria o mediante acuerdos con otros aportantes. En la práctica, la empresa opera frecuentemente a través de consorcios, con un porcentaje de propiedad que en promedio es cercano al 50%, o bien, con el 100% de la participación.

El Grupo cuenta con amplia experiencia en la gestión integral de concesiones, especialmente en las áreas de infraestructuras viales, transporte de energía, promoción y explotación de centrales fotovoltaicas y gestión de aparcamientos.

La baja etapa de maduración de los proyectos en cartera se traduce en que se proyecte un crecimiento significativo de los flujos de caja de los proyectos durante los próximos 5 años. En contrapartida, las necesidades de inversión asociadas a su desarrollo son también relevantes. Montos de capital pendientes de aportar para el periodo 2011-2015 bordean los €725 millones, en tanto el financiamiento alcanzaría un monto cercano a los €2.400 millones. Al respecto, cabe destacar que el respaldo del Grupo sobre ICC se ha manifestado en forma explícita a través del aporte de fondos requeridos para el desarrollo de proyectos, de gestión para la obtención de créditos en el mercado internacional y su compromiso para garantizar la finalización de proyectos.

Destaca el uso de vehículos de propósito específico para desarrollar cada uno de sus proyectos de concesión (100% de los actuales proyectos bajo esta modalidad). El financiamiento de éstos ha incluido la incorporación de deudas con estructuras en moneda local y con coberturas de tasa de interés y de largo plazo, coherentes con los flujos de la operación, sin recurso para ICC, lo que implica que el pago de la deuda asociada descansa en forma exclusiva en la capacidad de generación de flujos de los respectivos proyectos, sin extenderse la obligación de pago a ICC.

En contrapartida, el derecho de ICC sobre los flujos de caja operativos generados por los proyectos, se encuentra limitado sólo a la posibilidad de recibir dividendos o de efectuar reducciones de capital. Al respecto, el ejercicio de dichas opciones está condicionado al cumpli-

**FACTORES SUBYACENTES A LA CLASIFICACION**

### Fortalezas

- Diversificación por clientes, mercados y áreas de negocio
- Amplia experiencia y sólido *track record*, constituyéndose en un actor relevante en líneas de transmisión a nivel global.
- Importante cartera de contratos pendientes de ejecutar
- Privilegio del Grupo controlador por una fuerte posición de caja.

### Riesgos

- Cartera de concesiones en etapa inicial de desarrollo se traduce en un aún bajo aporte de estos proyectos en términos de flujos y en fuertes necesidades de capex en los próximos años.
- Participación del Grupo en negocios de alta competencia y estrechos márgenes (I&C) y capital intensivas (Concesiones).
- Elevado nivel de endeudamiento y coberturas ajustadas del Grupo.

| | |
|---|---|
| Solvencia | BBB+ |
| Perspectivas | Estables |

miento de *covenants* de ratios de cobertura de servicio de la deuda (RCSD). Los *covenants* específicos de RCSD dependen de cada proyecto en particular, no obstante se ubican mayoritariamente en torno a 1,3x.

Las concesiones de líneas de transmisión no están sujetas al riesgo de demanda, lo que aporta a la estabilidad de los flujos. Feller Rate considera que la alta calidad de los flujos proyectados asociados a la operación de este tipo de obras, en conjunto con el buen acceso a los mercados financieros del controlador, sustentan la incorporación en estos proyectos de favorables estructuras de financiamiento, cuyos pagos disponen de una fuerte capacidad de cobertura por parte de los flujos de caja generados por sus respectivas operaciones.

El riesgo asociado a proyectos de autopistas, en tanto, se ha visto parcialmente mitigado por contar., algunas de estas, con tráfico existente y cobro de peajes desde el momento en que comienza la inversión, como son el caso de Panipat, Varanasi y BR116.

Una vez adjudicada una licitación por parte de ICC, la empresa contrata a otras sociedades del Grupo para el desarrollo del proyecto. Las relaciones de negocio se encuentran estructuradas a través de contratos EPC, bajo un esquema “llave en mano”. Esta modalidad transfiere los riesgo de sobre costos desde ICC a las sociedades contratistas, los que no obstante, por tratarse de empresas relacionadas, permanecen radicadas en el controlador.

Los estados financieros de ICC se presentan a nivel individual, por lo que éstos no son representativos del nivel de actividad de la sociedad en el perímetro de consolidación de la entidad. La estructuración de los distintos proyectos bajo sociedades de vehículo específico se traduce en que la capacidad de pago de ICC se sustente casi exclusivamente por los dividendos percibidos y/o retiros de capital. Al cierre del ejercicio 2010, los dividendos percibidos por ICC ascendieron a €62 millones, lo cuales correspondieron a Isolux Energía e Participaciones, S.A. Concesionaria de Autopista Monterrey -Saltillo, S.A.C.V. En igual periodo, la deuda financiera individual de la empresa alcanzó a €183 millones. No obstante este monto se considera significativo dada la actual capacidad de generación de resultados, según lo informado por la empresa, estas obligaciones fueron prepagadas durante 2011, por lo que actualmente la empresa no registraría deuda financiera.

El Grupo Isolux Corsán es uno de los principales grupos españoles de ingeniería y construcción, con ventas que alcanzaron los €$3.240 millones en 2010. Sus actividades se dividen en tres grandes área de negocios: ingeniería, construcción y concesiones. Los diversos proyectos cubren una amplia gama de sectores industriales destacando el sector energético y, en particular, el sector eléctrico. La complementariedad de las actividades que la empresa desarrolla genera sinergias importantes entre las distintas unidades operativas. Asimismo, el volumen de actividad alcanzado implica el logro de importantes economías de escala.

El Grupo históricamente ha mostrado una evolución positiva de sus ingresos en conjunto con una exposición cada vez mayor, en términos relativos, al sector internacional como resultado de la adecuada estrategia de diversificación geográfica, que le ha permitido compensar la contracción de la actividad en España y mantener el crecimiento evidenciado en el periodo pre-crisis.

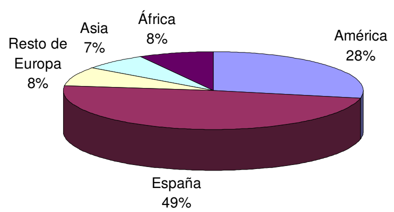
Si bien su principal mercado atendido continúa siendo España –que mantiene una clasificación “AA-/Negativas” en escala global de Standard & Poor’s–, se aprecia una sostenida disminución de la participación relativa en el periodo 2005-2010, pasando de concentrar desde un 89% de la facturación a un 49% al final del periodo. Se estima que esta tendencia se mantendrá, considerando que las inversiones en los próximos años se concentrarán fuertemente en el desarrollo de en proyectos concesionales de líneas de transmisión eléctrica y de autopistas. En relación a lo anterior, se espera observar un fuerte crecimiento en el aporte a resultados del área de concesiones en los próximos años, contribuyendo de forma importante a la estabilidad y predictibilidad de los flujos consolidados. Al cierre de 2010, esta área aportó el 5% de los ingresos y el 36% del Ebitda consolidado del Grupo Isolux Corsán. Al 31 de diciembre de 2010, la empresa mantenía una cartera total de contratos pendientes en por ejecutar por €30.180 millones. De éstos, €6.567 millones correspondían al área de I&C y los €23.613 millones restantes a proyectos concesionales.

El fuerte nivel de inversiones realizado en el área de concesiones en los últimos años, se ha traducido en un fuerte incremento en la deuda del Grupo a nivel consolidado, tanto estructurada bajo la modalidad de *Project finance,* sin recurso para el Grupo, como de deuda con recurso. A diciembre de 2010, la deuda financiera total del Grupo Isolux Corsán alcanzó €2.546 millones. De éstos el 49%

| Solvencia | BBB+ |
| --- | --- |
| Perspectivas | Estables |

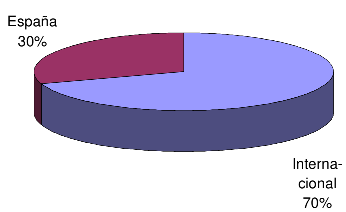
**GIC: Ingresos por mercados**

*Millones de Euros, 2010*




**GIC: Ebitda por mercados**

*Millones de Euros, 2010*




correspondía a deuda sin recurso, en tanto el 51% restante, €1.311 millones, correspondía a deuda con recurso, emitida mayoritariamente a través del *holding*.

El elevado endeudamiento se ha traducido en ajustados indicadores de cobertura, con ratios de deuda financiera total a Ebitda total y de deuda financiera con recurso a Ebitda con recurso de 8,6x y 2,0x, respectivamente, a diciembre de 2010. En la medida en que los proyectos asociados a concesiones empiecen a madurar, se espera que estos indicadores comiencen a mejorar gradualmente, no obstante, no se prevé una mejora substancial antes del 2013.

Al cierre de 2010, el Grupo mantenía importantes recursos en caja y equivalentes, los que ascendían a €938 millones. Estos recursos se consideran suficientes para cubrir las necesidades de efectivo en los próximos años, básicamente orientadas a cubrir los aportes de capital de los nuevos proyectos en concesión.

Por otra parte, el Grupo no tiene necesidades de refinanciamiento significativas en 2011-2012, con vencimientos del orden de los €104 millones y €170 millones en 2013 y 2014, respectivamente, montos que se consideran manejables. Vencimientos por cerca de los €464 millones en 2015, podrían generar algunas presiones de refinanciamiento.

Las necesidades de financiamiento externo, son significativas en el periodo 2011-2015, estando asociadas básicamente al desarrollo de concesiones. Sin embargo, como política, el Grupo se presenta a licitaciones asegurando el soporte financiero de entidades financieras en caso de licitación, lo que se considera conservador. No se prevén necesidades de inversión adicionales, considerando la decisión del Grupo de no incurrir en nuevas inversiones en concesiones antes de realizar desinversiones.

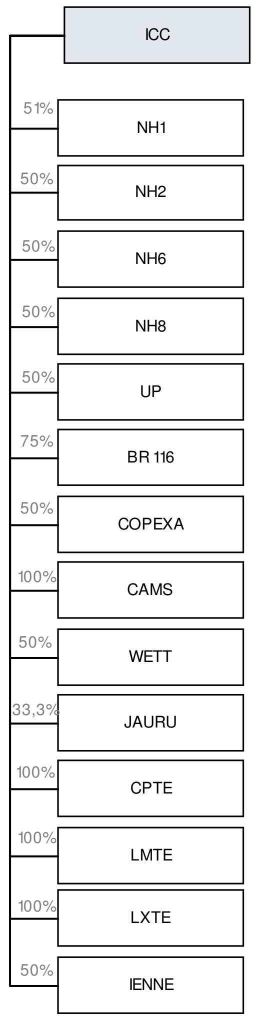
| | Sep. 2011 |
|---|---|
| Solvencia | BBB+ |
| Perspectivas | Estables |

## ICC: Resumen Financiero Individual

*(Cifras en miles de euros)*

| | 2008 | 2009 | 2010 |
|---|---|---|---|
| Ingresos ordinarios | 27.204 | 4.546 | 65.220 |
| Ebitda | 13.948 | -8.652 | 53.718 |
| Gastos financieros | -228 | -2.007 | -14.663 |
| Ingresos financieros | 31 | 7 | 1 |
| Utilidad del ejercicio | -4.001 | 18.557 | 43.638 |
| | | | |
| Activos totales | 341.860 | 517.130 | 617.955 |
| Activo corriente | 26.974 | 22.450 | 43.282 |
| Efectivo y Equivalentes | 1.336 | 1.146 | 854 |
| Créditos a empresas del grupo y asociadas | 2.473 | 15.568 | 38.676 |
| Activo no corriente | 314.886 | 494.680 | 574.673 |
| Inv. en empresas del grupo y asociadas | 297.199 | 460.076 | 546.906 |
| Pasivos totales | 247.748 | 446.729 | 518.814 |
| Pasivo corriente | 245.503 | 346.836 | 334.943 |
| Deudas con entidades de crédito | 0 | 879 | 914 |
| Deudas con emp. del grupo y asociadas | 237.713 | 341.021 | 331.580 |
| Pasivo no corriente | 2.245 | 99.893 | 183.871 |
| Deudas con entidades de crédito | 2.000 | 99.648 | 182.822 |
| Patrimonio neto | 94.112 | 70.401 | 99.141 |
| | | | |
| Margen Ebitda (%) | 51,3 | -190,3 | 82,4 |
| Pasivos totales / Patrimonio | 2,6 | 6,3 | 5,2 |
| Deuda financiera / Patrimonio | 0,0 | 1,4 | 1,9 |
| Ebitda / Gastos financieros | 61,2 | -4,3 | 3,7 |
| Deuda financiera / Ebitda | 0,1 | -8,9 | 2,4 |

## Estructura societaria ICC



## Características concesiones de ICC

| Concesión | País | Tipo concesión | Año Adjudicación | Inicio Operaciones |
|---|---|---|---|---|
| Panipat – Jalandhar TOLLWAY PRIVATE LIMITED | India | Autopista | 2008 | Operativa |
| VARANASI AURANGABAD TOLLWAY PRIVATE LIMITED | India | Autopista | 2010 | Operativa |
| Surat Hazira Tollway Private Limited | India | Autopista | 2009 | 2012 |
| Kishangarh Beawar Tollway Private Limited | India | Autopista | 2009 | 2012 |
| ENE Uttar Pradesh India | India | Línea Tx | 2011 | 2014 |
| Rodovía BR 116 | Brasil | Autopista | 2009 | Operativa |
| Concesionaria Autopista Perote-Xalapa S.A. de C.V. | México | Autopista | 2008 | 2012 |
| Concesionaria Autopista Monterrey Saltillo S.A de C.V. | México | Autopista | 2006 | 2010 |
| Wind Energy Transmission Texas | USA | Línea Tx | 2009 | 2013 |
| Jauru transmissora de energia s.a. | Brasil | Línea Tx | 2007 | Operativa |
| Cachoeira Paulista Transmissora de Energia S/A | Brasil | Línea Tx | 2002 | Operativa |
| Linhas de Macapá Transmissora de Energia S/A | Brasil | Línea Tx | 2008 | 2012 |
| Linhas de Xingu Transmissora de Energia S.A. | Brasil | Línea Tx | 2008 | 2012 |
| Interligacao Electrica Norte e Nordeste S.A. | Brasil | Línea Tx | 2008 | Operativa |

## Grupo Isolux Corsán: Resumen Financiero Consolidado

*(Cifras en millones de euros)*

| | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|---|
| Ventas | 1.871 | 2.415 | 3.317 | 3.019 | 3.240 |
| Crec. Vtas. | 18% | 29% | 37% | -9% | 7% |
| Ebitda total (1) | 98 | 186 | 246 | 249 | 294 |
| Ebitda con recurso (2) | | | 34 | 74 | 112 |
| Gastos financieros | -26 | -31 | -122 | -140 | -172 |
| Ingresos financieros | 15 | 45 | 38 | 34 | 56 |
| Resultado del ejercicio | 102 | 88 | 91 | 56 | 64 |
| | | | | | |
| Activos totales | 2.591 | 3.294 | 4.292 | 5.193 | 6.104 |
| Activos corrientes | 1.467 | 1.884 | 2.367 | 2.436 | 3.314 |
| Efectivo y equivalentes | 191 | 289 | 289 | 421 | 938 |
| Cuentas por cobrar | 1.119 | 1.360 | 1.477 | 1.655 | 1.942 |
| Existencias | 151 | 227 | 386 | 358 | 428 |
| Otros activos corrientes | 6 | 7 | 216 | 2 | 7 |
| Activos no corrientes | 1.124 | 1.411 | 1.925 | 2.757 | 2.790 |
| Activos intangibles asignados a proyectos | | 426 | 660 | 1.394 | 1.401 |
| Otro inmovilizado asignado a proyectos | | 118 | 274 | 279 | 252 |
| Pasivos totales | 1.980 | 2.645 | 3.647 | 4.467 | 5.334 |
| Pasivo corrientes | 1.495 | 1.951 | 2.229 | 2.603 | 3.241 |
| Deuda con entidades de crédito cp | 51 | 166 | 144 | 217 | 373 |
| Financiación sin recurso cp | 10 | 38 | 151 | 142 | 222 |
| Proveedores y otras cuentas por pagar | 1.343 | 1.689 | 1.873 | 2.192 | 2.559 |
| Otros pasivos corientes | 91 | 59 | 61 | 53 | 86 |
| Pasivos no corrientes | 485 | 694 | 1.418 | 1.864 | 2.093 |
| Deuda con entidades de crédito lp | 270 | 249 | 711 | 691 | 878 |
| Financiación sin recurso lp | 162 | 359 | 534 | 828 | 1.013 |
| Otros pasivos no corrientes | 53 | 85 | 172 | 345 | 203 |
| Total patrimonio | 612 | 650 | 645 | 725 | 771 |
| Interés Minoritario | 5 | 34 | 22 | 52 | 75 |
| | | | | | |
| Variación de capital de trabajo | 123 | 4 | -268 | 442 | 59 |
| Flujo de fondos operacionales | 84 | 132 | 234 | 230 | 268 |
| Flujo de caja neto de la operación | 207 | 136 | -34 | 672 | 209 |
| Flujo de caja neto de inversiones | -25 | -246 | -627 | -590 | -300 |
| Flujo de caja neto de financiamiento | -192 | 208 | 661 | 52 | 605 |
| Variación neta de efectivo | -10 | 98 | 0 | 133 | 517 |
| Caja inicial | 201 | 191 | 289 | 287 | 421 |
| Caja final | 191 | 289 | 289 | 421 | 938 |

*(1) Ebitda: Resultado Operacional + Amortizaciones y depreciaciones de Inmovilizado material.*

*(2) Estimación realizada por Feller-Rate.*

## Grupo Isolux Corsán: Principales indicadores

| | 2007 | 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|---|
| Margen Ebitda (%) | 5,2 | 7,7 | 7,4 | 8,3 | 9,1 |
| Rent. Patrimonial (%) | 16,6 | 13,5 | 14,1 | 7,7 | 8,3 |
| Rentabilidad sobre activos. (%) | 3,9 | 2,7 | 2,1 | 1,1 | 1,0 |
| Pasivos totales / Patrimonio | 3,2 | 4,1 | 5,7 | 6,2 | 6,9 |
| Ebitda total / Gasto financiero total | 3,7 | 6,0 | 2,0 | 1,8 | 1,7 |
| Ebitda total / Gasto neto financiero total | 8,4 | -13,6 | 2,9 | 2,4 | 2,5 |
| Deuda financiera total / Patrimonio | 0,8 | 1,3 | 2,4 | 2,6 | 3,3 |
| Deuda fin. con recurso / Patrimonio | 3,3 | 2,2 | 4,2 | 5,3 | 7,2 |
| Deuda financiera total / Ebitda total | 5,0 | 4,4 | 6,4 | 7,6 | 8,6 |
| Deuda financiera neta total / Ebitda total | 3,1 | 2,8 | 5,2 | 6,0 | 5,5 |
| Deuda fin. con recurso / Ebitda con recurso | 1,3 | 0,7 | 2,8 | 2,9 | 2,0 |
| FFO / Deuda financiera neta total (%) | 28 | 25 | 18 | 15 | 17 |
| FFO / Deuda financiera total (%) | 17 | 16 | 15 | 12 | 11 |
| Liquidez corriente | 0,98 | 0,97 | 1,06 | 0,94 | 1,02 |

# APPENDIX H

Feller-Rate
CLASIFICADORA DE RIESGO
Strategic Affiliate of Standard & Poor's

# ISOLUX INGENIERIA, S.A.

CREDIT RATING REPORT
November 2012

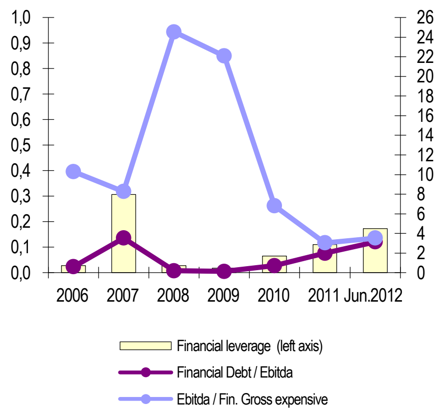
| | Nov. 2012 |
|---|---|
| Credit Rating | A- |
| Outlook | Stable |

### Highlighted Ratios and Indicators

| | 2010 | 2011 | Jun.2012 |
|---|---|---|---|
| Operational Margin | 5,7% | 3,7% | 8,4% |
| Ebitda Margin | 6,1% | 4,2% | 8,9% |
| Return on Equity* | 7,2% | 3,0% | 2,7% |
| Leverage | 2,0 | 1,8 | 2,0 |
| Financial Leverage | 0,09 | 0,13 | 0,20 |
| Ebitda / Financial expenses | 6,8 | 3,0 | 3,5 |
| Ebitda / Net Financial expenditures | -6,9 | -2,5 | 9,1 |
| Financial Debt / Ebitda * | 0,7 | 2,0 | 3,1 |
| Current Ratio | 1,1 | 1,2 | 1,2 |

*Annualized as of June 2012

### Leverage and creditworthiness' ratios trends





Analysts: Nicolás Martorell.
nicolas.martorell@feller-rate.cl
(562) 757-0496
Benjamín Rojas.
Benjamin.rojas@feller-rate.cl
(562) 757-0427


## Rationale

Isolux Credit Rating at "A-" reflects its strong business position and experience and the adequate diversification of its sources of income, in terms both of business lines and geographic markets. On the other hand it considers its involvement in a highly competitive and cyclical industry, with significant risks tied to cost overruns of projects and its exposure to the current risks of the Spanish market and economy, within a global crisis scenario, which altogether have had an impact on the financial profile of the corporation. A relevant factor that also limits its credit rating is the high leverage and tight financial coverage ratios of its parent company, with which it maintains a high degree of financial, operational and commercial integration.

Isolux Ingenieria and its subsidiaries handle the Engineering and Industrial Services business activities of Isolux Corsan Group, representing approximately 44% of the consolidated Ebitda, as of 2011. Isolux Corsan is the largest private Spanish holding of applied engineering, providing adequate support to Isolux Ingenieria. However, this high integration and group-leverage (total financial debt over EBITDA at 10.9x as of December 2011) gravitate on its risk profile, in line with the holding's.

As a result of its geographical diversification strategy, Isolux shows a growing international business, which represents 68% of its total income as of December 2011, making it less dependent on Spain. During 2009 the company faced a sharp decline of photovoltaic energy projects in Spain and during 2010 market conditions continued to deteriorate, altogether slowing down previous years' growth rates. The company partially offset this local scenario thanks to its international activity. However, during 2011 and 2012 the international crisis has taken its toll on the aggregate income, despite maintaining high and increasing levels of back-log. As of June 30, 2012, backlog adds-up to €3,657 million, very close to €3,711 million shown as of December 2011, and equivalent to 25 months of operations. As a consequence, during 2011 total income registered a downfall of 27.4% from 2010 (also explained by some project delays). By the end of 2012 EBITDA margin is expected to be close to 8%, showing a recovery from the 4.2% of the previous year.

Past low level of financial leverage (0.07x during 2008 – 2011) was key to support the credit rating. This indicator reflects the benefits of fixed-price contracts in which down-payments and interim payments as per partial completion reduce the need for working capital. On the other hand, fixed-price contracts permanently expose the company to the risk of extra costs, which are more significant in more competitive scenarios, such as the actual emerging economies.

However, since 2011 and as of July 2012, the ratio Financial Debt over EBITDA has deteriorated considerably, due to a sharp drop in EBITDA (50.1% decrease 2011 vs. 2010) added to a larger need of working capital. As of July 2012 financial debt increased to €97.7 million from an average of €25.4 million during the 2008–2010 periods. As an outcome this ratio reached 3.1x as of July 2012, tripling the 0.9x of the 2005–2010 period.

Isolux Ingenieria has historically featured a strong liquidity position, with cash resources of €131 million which compares favorably with its short-term debt of €89 million, both as of June 2012. Also, its integration with the holding company and its credit lines safeguard an adequate financial flexibility.

## Outlook: Stable

Stable Outlook is based on Feller Rate's expectation that its integration with Isolux Corsan Group, its strong business position, adequate liquidity and a balanced project portfolio of energy projects, both locally and internationally, together with its markets diversification strategy, should allow the company to continue to offset the ongoing unfavorable outlook for the industry in Spain during 2012 and into 2013, thus maintaining its credit parameters in line with its rating.

### MAJOR RATING FACTORS

### Strengths

- Strong business position on its main markets and niches.
- Business and geographic diversification.
- Adequate liquidity.
- Support of Isolux Corsan holding, based on a high level of integration.

### Risks - weaknesses

- Group involvement in highly competitive and low-margin industry (Engineering and Construction) and in capital intensive projects (concessions).
- Cyclical nature of its business lines.
- Contingencies and cost overrun risks.
- Contraction of civil engineering activity in Spain, deepening during 2011 and into 2013.
- High leverage and tight financial coverage ratios of Isolux Corsan holding.

| Credit Rating | A- |
|---|---|
| Outlook | Stable |

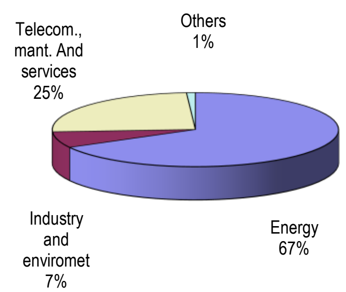
**Ownership**

*Isolux Corsan Group has been actively involved in the Spanish industry for over 70 years, and has a long-established reputation in engineering projects, construction, assembly, reparations, maintenance and servicing.*

*The Group has a solid footing in the international industry and maintains a presence – through subsidiaries, representative offices and projects – in 34 countries, including Angola, Algeria, Latin America, U.S.A. and Qatar.*

**Sales by Business area**

*As of December 2011*




## BUSINESS RISK PROFILE — *SATISFACTORY*

Isolux Ingeniería, Inc., a company following the operations and business of Isolux Wat, Inc., by the end of 2004 acquired Corsan-Corviam, Inc., thus creating Isolux Corsan Group.

### Parent Company’s support is based on its high degree of integration with Isolux Corsan Group

Isolux Corsan Group is one of the major Spanish engineering and construction holdings, with sales volume of €3,371 million as of 2011. Its three main business units are engineering, construction and concessions. Projects cover a wide range of industries, especially energy and specifically the electricity sector. The company generates important synergies among its business units due to the complementary nature of its activities. Also, the volume of operations achieved by the company allows significant economies of scale.

Isolux Ingenieria leads a sub-group of companies that handle all the business activities regarding Engineering and Industrial Services of Isolux Corsan Group, representing as of 2011 approximately 53% of total revenues and 44% of the consolidated Ebitda, thus being the Group’s main business unit together with concessions. Being part of the group provides a strong financial and commercial support, plus synergies and complementarity in terms of its operations. The group centralizes its treasury operations and provides short-term credit lines in order to obtain tender and technical guarantees, altogether resulting in a high degree of integration. Therefore, changes in the risk profile of Isolux Corsan Group would be directly linked with changes in the profile of Isolux Ingenieria.

### An adequate diversification of business activities

Isolux Ingenieria is focused in project development and comprehensive management in a wide range of industrial sectors. The company is organized into three business units: energy; telecommunications, services and maintenance; and environment and industry.

Its previous traditional main activities were telecommunications and assembly. However, as of 2007 these activities have been pushed into second place by the energy sector – including electricity generation projects, power transmission lines and renewable energies projects. This is the outcome of significant investments over the last few years made in this business area, despite 2009’s business decline – explained by an unfavorable regulatory framework for the photovoltaic sector in Spain. However, the company should maintain a strong position based on the growth of photovoltaic energy in several EU countries (e.g. Italy, Germany and Holland) and on investments in electric transmission lines in emerging economies.

The company portrays important synergies among its business units due to the complementary nature of its activities. Also, the volume of operations achieved by the company allows significant economies of scale.

The company’s client portfolio exhibits an adequate credit profile, which explains a record with no significant credit defaults.

### Strong business position in its main businesses and markets

Isolux has a strong market position in the Spanish market, and it is one of the major business groups within the applied engineering industry. Diversification of its activities, in terms of geographic markets and business lines, is a key factor that explains the company’s resilience, partially offsetting the credit crisis in Spain and the Eurozone since 2009.

### A cyclical and highly competitive industry

The company faces a highly competitive environment, both locally and internationally, and low barriers of entry into the markets. Altogether this translates into a constant pressure over margins, already tight, and especially low in the local Spanish market over the last few years. New challenges arise from a stronger competition, since this diversification strategy into emerging markets is shared by several construction and engineering companies throughout the world. This should put additional pressure over margins in bidding processes.

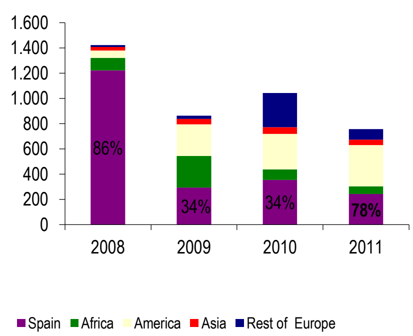
In Spain, this industry is dominated by independent companies and by large construction conglomerates. Additionally, diversified international high-tech companies such as Siemens, ABB and Alstom, can operate either as competitors or as clients. In other markets the company also faces competition from local specialized corporations.

A normal practice within the industry is the setting-up of consortiums conformed by competitive companies, in order to bid in large and technically complex projects. This format moderates competitive

| Credit Rating | A- |
|---|---|
| Outlook | Stable |

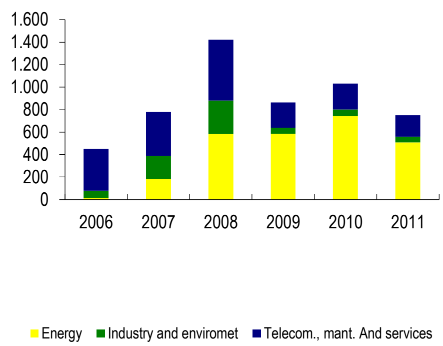
**A growing geographical diversification**

*Millions of euros*




**Sales trend by business area**

*Millions of euros*




pressures and stabilizes market shares. It also allows sharing the risk of each project and further diversification of the portfolio.

## Fixed-price contracts contribute to financial stability, however exposing Isolux to contingencies and risk of cost overruns

Isolux holds a rich expertise in the development of projects under the turnkey modality, and based on fixed-price contracts, usually considering down -payments and interim payments as per partial completion. This gives leeway to finance a substantial portion of its operations, matching the payment program of customers and suppliers, thus reducing its need of working capital.

On the other hand, its customers transfer the risk of project costs overruns and contingencies, however mitigated by the indexation to key input prices, which is a standard contract practice.

The group also gets involved in the financial structuring of projects, sometimes acting as a promoter and providing the partners needed for the operation and the execution of related activities.

Within the industrial assembly industry it is customary the use of letters of guarantee, in order to secure deadlines and the terms of the EPC. Feller-Rate takes a close look at the risk of guarantee executions associated to late deliveries, especially in more competitive environments such as the current worldwide scenario.

## Larger exposure to emerging markets partially offset by a lesser one to specific economies

The company has exhibited a growing exposure to the international market as an outcome of its diversification strategy, thus offsetting Spain's contraction and in order to maintain the growth of pre-crisis times. While its main market remains being Spain, its relative weight has diminished from 86% of total sales in 2008 to 33% over the last three years – during 2012 Spain experienced its sovereign risk being downgraded from "BBB+/Negative" to "BBB-/Negative" global scale by Standard & Poor's. This trend is explained by the strong growth of its activities within Latin America and in the energy sector (e.g. assembly of thermal and combined cycle plants, distribution power lines, and photovoltaic plants). However, Spain's weight is still significant and its weakness contributes to some volatility of this local source of income. The trend towards smaller exposure to relatively riskier economies should continue.

## Favorable *backlog* as of June 2012

As of June 30$^{th,}$ 2012, backlog adds up to €3,657 million, very close to €3,711 million shown as of December 2011, and equivalent to 25 months of operations. Within this backlog it is worth mentioning that projects tied to foreign operations represent close to 83% of the total. Also, close to 81% is explained by energy projects, in line with previous history.

| FINANCIAL POSITION | *ADEQUATE* |
|---|---|

## Profits and margins

*Adequate margins and positive returns, nevertheless subject to downturns after the 2009 and 2011contractions*

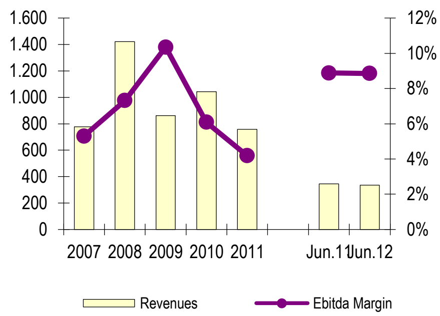
Company's sales exhibit an average yearly 31% growth from 2002 to 2008. This growth was fueled by the favorable performance of almost all of its business lines, especially the energy sector in Spain before the crisis. However, during 2009 the international financial crisis and the sharp decline of the photovoltaic business in Spain explain a 39.3% drop in overall sales. During 2010 the international front reignited the energy business and supported a vigorous 21% growth of Isolux versus 2009. However, during 2011 the sharp global contraction plus the delay in certain projects triggered by Isolux clients, took its toll on total income which decreased by 27.4%, reaching €757 million. As of June 2012 total income is 2% below the previous year.

Operational margins show a positive trend throughout 2006 up to 2009, explained by efficiency gains and the increased weight of the renewable energies sector within the activities-mix of the company, an area with higher margins. During 2010 the slowdown of its main market and – as a consequence – a scenario of enhanced competition, brought by a drop in the Ebitda margin from 10.4% in 2009 to 6.1%. During 2011 this margin reached 4.2%, due to higher expenses tied up to provisions triggered by a contingency in an

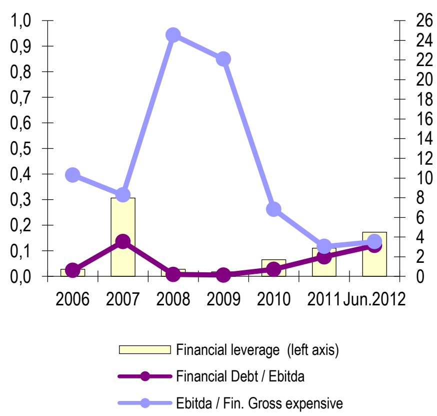
| | |
|---|---|
| Credit Rating | A- |
| Outlook | Stable |

**Revenues and margins evolutions**

*Millions of euros*




**Leverage trend & coverage ratios**




**Maturity profile of financial obligations**

*As of December 31st, 2011 (M €)*

| | Total Financial Debt |
|---|---|
| 2012 | 50.244 |
| 2013-2016 | 3.933 |
| 2017+ | 314 |

electric turbine. However as of June 2012 this margin at 8.4% has visibly recovered and it is expected to close the year within this range.

Feller Rate expects that the project portfolio, both local and international, together with energy projects, will allow to partially compensating the critical scenario for engineering projects in Spain throughout 2011 and into 2013. At the same time it is expected an ongoing pressure on operational margins due to the increased competition within a weakened economic backdrop, and also because of the need to finance larger working capital requirements.

## Leverage and financial flexibility

*Reflecting conservative financial policies and limited needs of working capital thanks to the terms of its contracts, however under pressure due to the global crisis and working capital financed with debt.*

Isolux Ingenieria has featured historically a very low debt over equity ratio. Isolux favors the use of fixed price contracts, which usually contemplate interim payments as per partial completion, giving leeway to finance a substantial portion of its operations, matching the payment program of customers and suppliers, thus reducing its need of external sources of finance. However, debt stock has increased since 2008 (€19.9 million), due to larger needs of working capital and within a volatile and unfavorable local and international scenario. Consolidated financial debt as of June 2012 has reached €96.7 million,0.2 times its equity.

This increased debt level translates into weaker coverage ratios. Annual debt over Ebitda has stepped from 0.1x in 2008 – 2009 to 0.7x in 2010, and reaching 2.0x in 2011 and 3.1x as of June 2012 respectively. The substantial decrease in Ebitda generation (a result of the contingency above mentioned) weighted on the ratio. Accordingly, the coverage of financial expenses has decreased due to a larger debt – as of June 2012 at 3.5x from an average of 23.3x during 2008 and 2009. Notwithstanding, the company maintains high and steady income sources that allow covering these financial expenses, and explains a robust coverage ratio reaching 9.1x as of June 2012.

Likewise, Isolux Corsan Group has seen an increase on their financial expenses due to new accounting criteria: as of 2011, in line with the restructuring of the Concessions area, the Group adopted new criteria regarding IFRIC 12 regulation related to the accounting of its concession assets. This has a one-time accounting impact in terms of a dis-allocation of interests as part of an asset (the project) and the immediate re-allocation as an expense.

## Strong liquidity position

The company exhibits an adequate liquidity position, with cash resources of €131 million which favorably compares with its short-term debt of €89 million, both as of June 2012. Also, the company maintains credit lines as a safeguard, and centralized treasury operations. Its adequate access to financial markets provides additional financial flexibility.

## Good business profile of Isolux Corsan Group, though under pressure due to tight financial profile

Isolux Corsan Group throughout its history shows a positive trend in sales together with an ever increasing exposure (relatively speaking) to the international sector, as a consequence of its geographic diversification strategy. This way it has offset the contraction experienced in Spain having maintained growth rates achieved in the pre-crisis period.

While its main market remains being Spain, its relative weight from 2005 to 2011 has decreased from 89% of total sales to 37%. This trend should continue, considering the concentration of investments for the forthcoming years in electric power lines and highways. In line with the above, the concessions business area should gain relevance in final profits over the next years, also contributing to the predictability and stability of the consolidated cash-flow. As of the end of 2011 this area accounted for 7% of total incomes and 46% of total Ebitda of Isolux Corsan Group. As of December 31st 2011, the company held a backlog of contracts worth €43,111 million, of which €7,075 million are Engineering & Construction projects and €35,805 million (the balance) are concession projects.

Significant investments over the last few years made in the concessions business area has brought a sharp increase in total debt of the Group, structured under project-finance arrangements both as

| | |
|---|---|
| Credit Rating | A- |
| Outlook | Stable |

recourse and non-recourse debt. It is worth mentioning that the consolidation of T Solar company contributed to increase total non-recourse debt related to project finance. As of December 2011 total financial debt reached €4,194 million, a substantial increase when compared to previous December at €2,546 million. Out of this total, 62% is non-recourse while the balance (€1,578 million) is recourse debt, almost completely allocated in the holding company.

The above has resulted in tight coverage ratios. Financial debt over Ebitda and financial recourse debt over Ebitda was 10.9x and 7.7x respectively, as of December 2011, compared to 8.6x and 7.2x as of December 2010. At the same time, the net financial recourse debt over recourse Ebitda ratio has increased from 2.0x in 2010 up to 4.4x in 2011. As projects within the concessions business area reach maturity, these consolidated ratios should show a gradual improvement. However the global scenario is a note of concern sobering any expectation of sudden and sharp improvements.

As of the end of 2011, the group held substantial cash and cash equivalent resources, adding up €674 million. These resources and future capital infusions from its partners are considered adequate to comply with cash demands over the next few years, basically equity requirements of new concession projects.

Furthermore, the group has no substantial needs to refinance in 2012 and 2013, with non-recourse debt maturities of €111 million as of July 2012 and €249 million each for 2013 and 2014, amounts that are manageable. Maturities adding up close to €476 million for 2015 could put some additional pressure.

Finance needs for 2013 to 2015 are estimated at €187 million, mainly capital outstanding in concessions by Isolux Group. However, the group's policy is to secure financial support before tendering, which is a conservative policy. Likewise, it is relevant to underline the adequate access to project finance without recourse (e.g. €600 million committed at Varasi – Urangabad road project in India; USD 600 million at Wind Energy Transmission in Texas, U.S.A., among others).

There are no foreseeable additional investment needs, taking into account the Group's decision of making no new investments in concessions before making divestments.

| | November 2012 |
|---|---|
| Credit Rating | A- |
| Outlook | Stable |

## Consolidated Financial Summary Isolux Ingenieria

*(M €)*

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | Jun.2012 | Jun.2011 |
|---|---|---|---|---|---|---|---|---|---|---|
| Revenues | 432.960 | 407.582 | 451.235 | 778.015 | 1.422.359 | 862.708 | 1.042.657 | 757.365 | 335.667 | 343.815 |
| Revenues growth (%) | 9,8% | -5,9% | 10,7% | 72,4% | 82,8% | -39,3% | 20,9% | -27,4% | | |
| Ebitda (1) | 33.788 | 35.350 | 19.635 | 41.196 | 104.049 | 89.292 | 63.487 | 31.656 | 29.727 | 30.548 |
| Financial Expenses | -7.821 | -1.492 | -1.902 | -4.979 | -4.241 | -4.042 | -9.322 | -10.440 | -8.445 | -7.965 |
| Financial Income | 0 | 554 | 571 | 2.581 | 14.882 | 12.230 | 18.474 | 23.104 | 5.178 | 8.457 |
| Net Income | 21.039 | 2.689 | 5.302 | 24.720 | 66.000 | 74.639 | 35.785 | 15.075 | 10.123 | 12.039 |
| | | | | | | | | | | |
| Total Assets | 440.068 | 754.132 | 901.089 | 1.251.495 | 1.185.348 | 1.192.033 | 1.466.167 | 1.405.679 | 1.405.679 | 1.253.610 |
| Cash and equivalents | n.a. | 24.867 | 26.603 | 147.811 | 61.225 | 81.817 | 129.387 | 78.935 | 131.345 | 69.507 |
| Short term Liabilities | 350.298 | 298.111 | 436.705 | 764.282 | 700.807 | 693.380 | 988.276 | 913.572 | 971.606 | 764.196 |
| Financial Debt | 52.773 | 12.718 | 12.497 | 145.567 | 19.999 | 11.135 | 44.958 | 62.782 | 96.738 | 40.870 |
| Equity | 88.310 | 452.701 | 455.583 | 475.531 | 484.541 | 498.653 | 494.006 | 501.443 | 493.055 | 489.413 |
| | | | | | | | | | | |
| Operational Margin (%) | 5,7 | 4,9 | -0,2 | 3,6 | 7,1 | 9,8 | 5,7 | 3,7 | 8,4 | 8,4 |
| Ebitda Margin (%) | 7,8 | 8,7 | 4,4 | 5,3 | 7,3 | 10,4 | 6,1 | 4,2 | 8,9 | 8,9 |
| Return on Equity (%)* | 23,8 | 0,6 | 1,2 | 5,2 | 13,6 | 15,0 | 7,2 | 3,0 | 2,7 | n.a. |
| Leverage | 4,0 | 0,7 | 1,0 | 1,6 | 1,4 | 1,4 | 2,0 | 1,8 | 2,0 | 1,6 |
| Financial Leverage | 0,60 | 0,03 | 0,03 | 0,31 | 0,04 | 0,02 | 0,09 | 0,13 | 0,20 | 0,08 |
| Ebitda / Financial expenses | 4,3 | 23,0 | 10,3 | 8,3 | 24,5 | 22,1 | 6,8 | 3,0 | 3,5 | 3,8 |
| Ebitda / Net Financial expenses | 4,3 | 37,7 | 14,8 | 17,2 | -9,8 | -10,9 | -6,9 | -2,5 | 9,1 | -62,1 |
| Financial Debt / Ebitda | 1,6 | 0,4 | 0,6 | 3,5 | 0,2 | 0,1 | 0,7 | 2,0 | 3,1 | n.a. |
| Current ratio | 1,0 | 1,4 | 1,3 | 1,2 | 1,2 | 1,2 | 1,1 | 1,2 | 1,2 | 1,2 |
| Cash / Short term debt | n.a. | n.a. | 8,3 | 1,1 | 6,4 | 9,3 | 3,7 | 1,4 | 1,5 | 2,3 |

(1) Ebitda = Operational Result + Amortization and depreciation of fixed assets

(2) n.a.: Not Available

## Consolidated Financial Summary Isolux Corsan Group

*(M €)*

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Revenues | 1.871 | 2.415 | 3.317 | 3.019 | 3.240 | 3.372 |
| Revenues growth | 18% | 29% | 37% | -9% | 7% | 4% |
| Ebitda (1) | 98 | 186 | 246 | 249 | 294 | 385 |
| Ebitda with resources (2) | | | 212 | 175 | 182 | 204 |
| Financial Expenses | -26 | -31 | -122 | -140 | -172 | -301 |
| Financial Income | 15 | 45 | 38 | 34 | 56 | 84 |
| Net Income | 102 | 88 | 91 | 56 | 64 | 5 |
| | | | | | | |
| Total Assets | 2.591 | 3.294 | 4.292 | 5.193 | 6.104 | 8.091 |
| Current Assets | 1.467 | 1.884 | 2.367 | 2.436 | 3.314 | 2.940 |
| Cash and equivalents | 191 | 289 | 289 | 421 | 938 | 674 |
| Accounts Receivables | 1.119 | 1.360 | 1.477 | 1.655 | 1.942 | 1.887 |
| Inventories | 151 | 227 | 386 | 358 | 428 | 358 |
| Others current assets | 6 | 7 | 216 | 2 | 7 | 20 |
| Noncurrent assets | 1.124 | 1.411 | 1.925 | 2.757 | 2.790 | 5.151 |
| Intangible assets associated with projects | | 426 | 660 | 1.394 | 1.401 | 2.451 |
| Other assets assigned to projects | | 118 | 274 | 279 | 252 | 1.489 |
| Total Liabilities | 1.980 | 2.645 | 3.647 | 4.467 | 5.334 | 7.195 |
| Current Liabilities | 1.495 | 1.951 | 2.229 | 2.603 | 3.241 | 3.224 |
| Current Debt credit institutions | 51 | 166 | 144 | 217 | 373 | 449 |
| Current Project Finance Debt | 10 | 38 | 151 | 142 | 222 | 358 |
| Accounts Payables | 1.343 | 1.689 | 1.873 | 2.192 | 2.559 | 2.303 |
| Other current liabilities | 91 | 59 | 61 | 53 | 86 | 113 |
| Long Term Liabilities | 485 | 694 | 1.418 | 1.864 | 2.093 | 3.971 |
| Long Term Debt credit institutions | 270 | 249 | 711 | 691 | 878 | 930 |
| Long Term Project Finance Debt | 162 | 359 | 534 | 828 | 1.013 | 2.258 |
| Other Long Term Liabilities | 53 | 85 | 172 | 345 | 203 | 783 |
| Equity | 612 | 650 | 645 | 725 | 771 | 893 |
| Minority interest | 5 | 34 | 22 | 52 | 75 | 293 |
| | | | | | | |
| Changes in Working Capital | 123 | 4 | -268 | 442 | -59 | -145 |
| Funds from operations | 84 | 132 | 234 | 230 | 268 | 289 |
| Cash flow from operations, | 207 | 136 | -34 | 672 | 209 | 144 |
| Free Operating Cash flow (3) | -25 | -246 | -627 | -590 | -300 | -1.045 |
| Discretionary Cash Flow(4) | -192 | 208 | 661 | 52 | 605 | 641 |
| Net Cash Flow | -10 | 98 | 0 | 133 | 517 | -261 |
| Cash and cash equivalents at beginning of the year | 201 | 191 | 289 | 287 | 421 | 938 |
| Cash and cash equivalents at ending of the year | 191 | 289 | 289 | 421 | 938 | 674 |

*(1) Ebitda = Operational Result + Amortization and depreciation of fixed assets*
*(2) Estimate by Feller-Rate.*
*(3) Free Operating Cash flow = Cash flow from operations – CAPEX*
*(4) Discretionary Cash Flow = Free Operating Cash flow - Cash flow from funding*

## Isolux Corsán Group: Credit Ratios

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Ebitda Margin (%) | 5,2 | 7,7 | 7,4 | 8,3 | 9,1 | 11,4 |
| Return on equity (%) | 16,6 | 13,5 | 14,1 | 7,7 | 8,3 | 0,6 |
| Return on assets (%) | 3,9 | 2,7 | 2,1 | 1,1 | 1,0 | 0,1 |
| Leverage | 3,2 | 4,1 | 5,7 | 6,2 | 6,9 | 8,1 |
| Ebitda / Financial expenses | 3,7 | 6,0 | 2,0 | 1,8 | 1,7 | 1,3 |
| Ebitda total / Net financial expenses | 8,4 | -13,6 | 2,9 | 2,4 | 2,5 | 1,8 |
| Financial Leverage | 0,8 | 1,3 | 2,4 | 2,6 | 3,3 | 4,7 |
| Financial recourse Leverage | 0,5 | 0,6 | 1,4 | 1,3 | 1,7 | 1,8 |
| Financial Debt / Ebitda | 5,0 | 4,4 | 6,4 | 7,6 | 8,6 | 10,9 |
| Net Financial Debt / Ebitda | 3,1 | 2,8 | 5,2 | 6,0 | 5,5 | 9,1 |
| Financial recourse Debt / Ebitda with recourse | 3,3 | 2,2 | 4,2 | 5,3 | 7,2 | 7,7 |
| Net Financial recourse Debt / Ebitda with recourse | 1,3 | 0,7 | 2,8 | 2,9 | 2,0 | 4,4 |
| FFO / Net Financial Debt (%) | 28 | 25 | 18 | 15 | 17 | 8 |
| FFO / Financial Debt (%) | 17 | 16 | 15 | 12 | 11 | 7 |
| Current Ratio | 0,98 | 0,97 | 1,06 | 0,94 | 1,02 | 0,91 |

# APPENDIX I

TransCanada believes the road to success is supported by cultural exchange and understanding. Traditional land use studies are an important element to our project development process and TransCanada is committed to identifying and preserving important natural and cultural landscapes near our facilities and proposed developments.

**For more details:**

**To reach our Community, Safety and Environment department directly, please email us at:**
**cs_e@transcanada.com**

**For general information, please call:**
**1.800.661.3805**

**Or visit our website at:**
**www.transcanada.com**

AR/05/01

# ABORIGINAL RELATIONS

**TransCanada** — COMMITED TO BEING A GOOD NEIGHBOUR AND TO BUILDING AND MAINTAINING POSITIVE RELATIONSHIPS

## OUR APPROACH

**Communication — Engagement — Commitment**
We recognize the diversity and uniqueness of each community, the significance of the land and traditions, and the importance of building relationships based on mutual respect and trust.

**Collaborating with Aboriginal communities**
To support safe, healthy and vibrant communities we invest in cultural, educational and environmental initiatives.

**Creating an inclusive and supportive working environment**
Our Aboriginal human resources strategy supports an inclusive and supportive work environment for our employees.

Our Aboriginal contracting strategy supports opportunities for Aboriginal businesses to engage in our ongoing operations and development of new projects.

We truly appreciate and value the experience and knowledge of our employees and contractors and recognize the enormous contributions made by each individual.

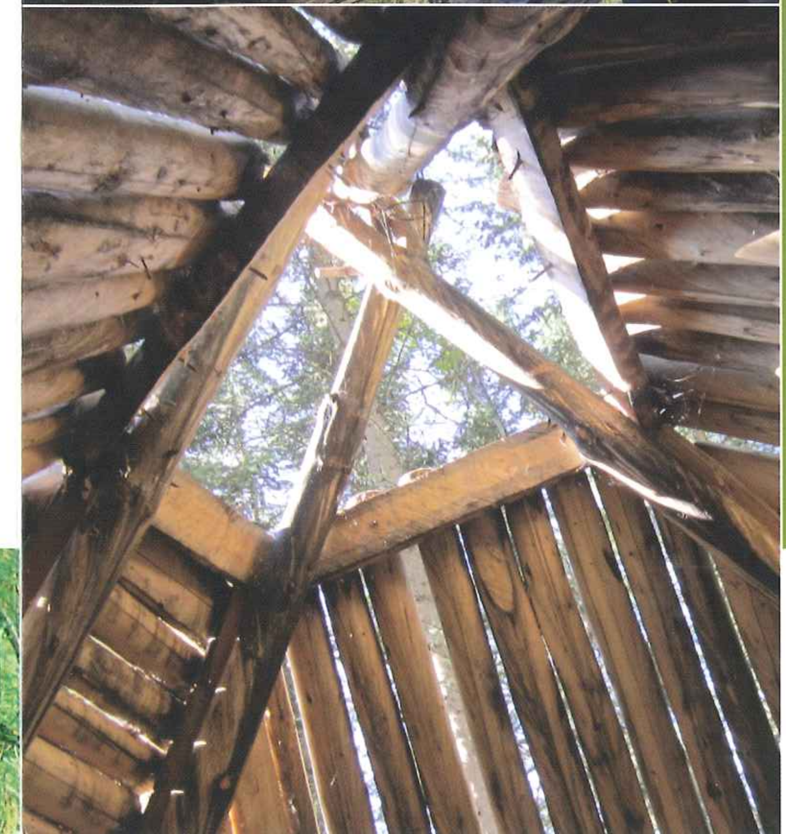
**Investing in education**
TransCanada has been a long-time contributor to many educational initiatives. The company awards hundreds of thousands of dollars through scholarships, bursaries, material contributions and in-kind donations to students and educational organizations across the country.

Through these initiatives, we can help support the increasing number of Aboriginal professionals and trades people entering and preparing for tomorrow's workforce, contributing to an outcome beneficial to both the energy and resource industry and the Aboriginal communities.

We are proud of our long-standing commitment to education and will continue to enhance and find new ways of furthering our support.

**Awareness**
To support TransCanada's employee understanding of Aboriginal history and culture, and the role Aboriginal people play in Canada and in our business, we continue to offer ongoing training programs specifically for our employees and contractors.

**The future**
TransCanada will continue to review and adapt our Aboriginal Relations Policy, programs and initiatives to meet the changing needs of our business and the Aboriginal communities.



## ABORIGINAL RELATIONS POLICY

TransCanada constructs and operates our facilities near many Aboriginal communities across Canada.

TransCanada believes by developing positive, long-term relationships with the Aboriginal communities whose lives may be impacted by our activities, we can conduct our business while respecting the community interests.

TransCanada's Aboriginal Relations Policy must be flexible to address the legal, social and economic realities of Aboriginal communities across Canada.

**The following principles guide this policy:**

- TransCanada respects the diversity of Aboriginal cultures, recognizes the importance of the land and cultivates relationships based on trust and respect;
- TransCanada works together with Aboriginal communities to identify impacts of company activities on the community's values and needs in order to find mutually acceptable solutions and benefits;
- TransCanada strives to create short and long-term employment opportunities for Aboriginal people impacted by our activities;
- TransCanada supports learning opportunities for Aboriginal people to provide a well-trained source of Aboriginal employees and to build capacity within Aboriginal communities;
- TransCanada respects the legal and Constitutional rights of Aboriginal peoples and recognizes that its relationships with Aboriginal peoples are separate and different from that of the Crown.

All TransCanada employees have a responsibility to help build and maintain relationships with the Aboriginal communities we do business with.